

1958
CENSUS OF MINERAL INDUSTRIES

VOLUME I
PRELIMINARY REPORTS

SUMMARY STATISTICS
AND
MAJOR GROUPS 10-14

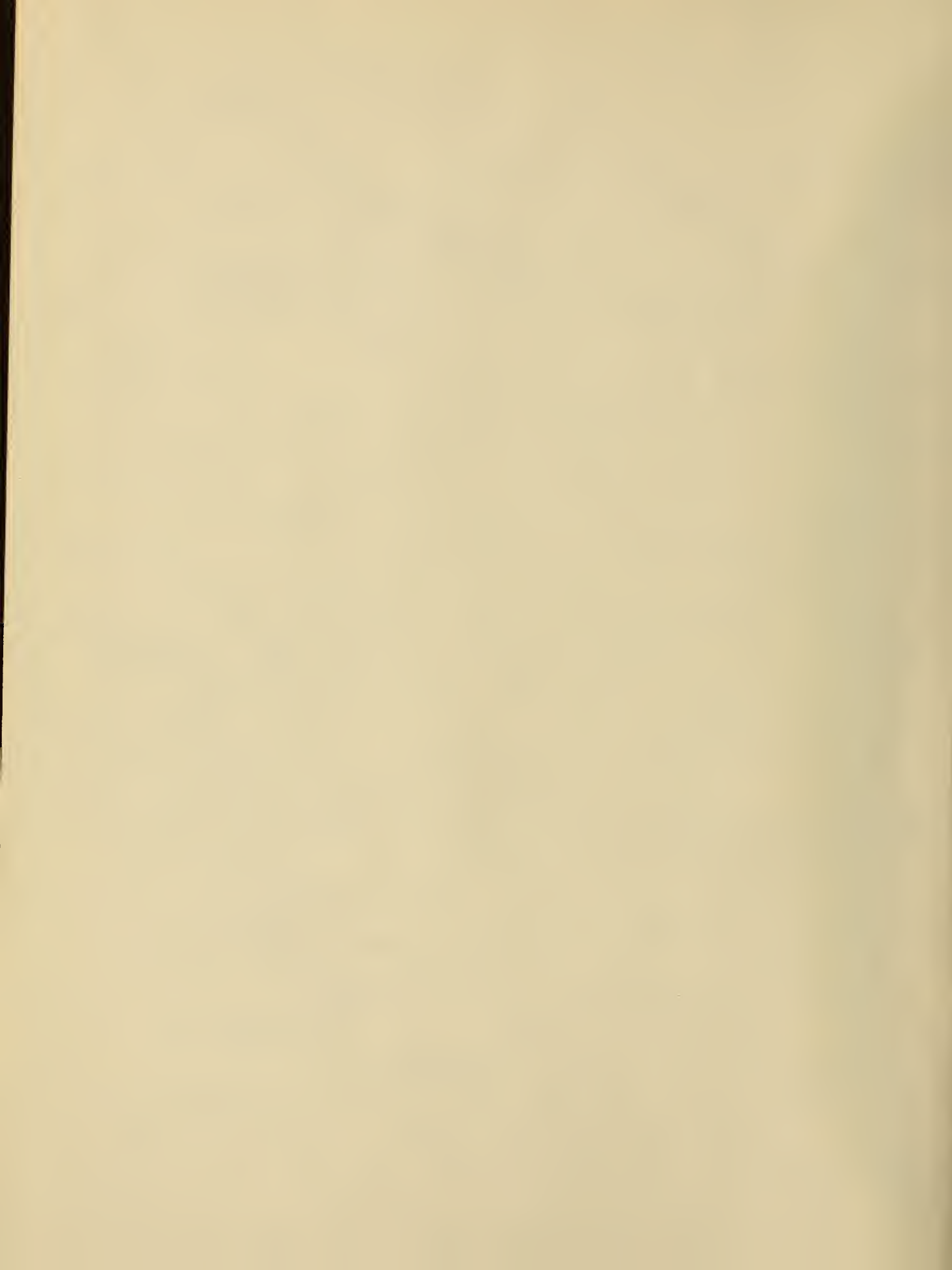
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Report Number	Summary
MI(P)-1	Summary Statistics: Industry Groups and Industries (4-digit)
MIC(F)-2	Summary Statistics: Geographic Divisions and States (2-digit)

Report number MIC(P)-	Ind. code	Industry	Report number MIC(P)-	Ind. code	Industry
			14B	1411	Dimension stone
10B	1011	Iron ores	14C	(1421	Crushed and broken stone
10D	1021	Copper ores		(1422	Crushed and broken limestone
10E	1031	Lead and zinc ores		(1423	Crushed and broken granite
	(1042	Lode gold		(1429	Crushed and broken stone, n.e.c.
10F	(1043	Placer gold			
10G	1044	Silver ores	14D	1441	Sand and gravel
10H	1051	Bauxite	14E-1	(1452	Bentonite
10I-1	1062	Manganese ores		(1454	Fuller's earth
2	1064	Tungsten ores	2	1453	Fire clay
3	1069	Molybdenum, chromium, cobalt, and nickel ores	3	1455	Kaolin and ball clay
			4	(1456	Feldspar
	(1081	Metal mining stripping services		(1457	Magnesite and brucite
10J	(1082	Metal mining services, except stripping	5	1459	Clay, ceramic, and refractory minerals, n.e.c.
	(		14F-1	1472	Barite
10K-1	(1092	Mercury ores	2	1473	Fluorspar
	(1099	Metallic ores, n.e.c.	3	1474	Potash, soda, and borate minerals
(Rev) 2	1093	Titanium ores	4	1475	Phosphate rock
3	1094	Uranium-radium-vanadium ores	5	1476	Rock salt
11B-1	1111	Anthracite	6	1477	Sulfur
	(1112	Anthracite stripping services	7	1479	Chemical and fertilizer mineral mining, n.e.c.
2	(1113	Anthracite mining services, except strip mining	14G	(1481	Nonmetallic minerals stripping services
				(1482	Nonmetallic minerals (except fuels) services, except stripping
12A-1	(1211	Bituminous coal			
	(1212	Lignite	14H-1	1492	Gypsum
2	(1213	Bituminous coal and lignite stripping and auger mining services	2	1493	Mica
	(1214	Bituminous coal and lignite mining services, n.e.c.	3	(1494	Native asphalt and bitumens
13B-1	1311	Crude petroleum and natural gas		(1498	Peat
2	--	Offshore oil and gas - Special report	4	(1495	Pumice and pumicite
				(1497	Natural abrasives, exc. sand
13C	1321	Natural gas liquids	5	1496	Talc, soapstone, and pyrophyllite
13D-1	1381	Drilling oil and gas wells services	6	1499	Miscellaneous nonmetallic minerals, n.e.c.
2	1382	Oil and gas field exploration services			
3	1389	Oil and gas field services, n.e.c.			

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INDEX OF PRELIMINARY REPORTS, BY INDUSTRY CODE

Report
number

Summary

MI(P)-1 Summary Statistics: Industry Groups and Industries (4-digit)

MIC(P)-2 Summary Statistics: Geographic Divisions and States (2-digit)

Ind. code	Report number MIC(P)-	Industry	Ind. code	Report number MIC(P)-	Industry
1011	10B	Iron ores	1411	14B	Dimension stone
1021	10D	Copper ores	1421	14C	Crushed and broken stone
1031	10E	Lead and zinc ores	1422	14C	Crushed and broken limestone
1042)		(Lode gold	1423	14C	Crushed and broken granite
1043)	10F	(Placer gold	1429	14C	Crushed and broken stone, n.e.c.
1044	10G	Silver ores	1441	14D	Sand and gravel
1051	10H	Bauxite	1452	14E-1	Bentonite
1062	10I-1	Manganese ores	1453	2	Fire clay
1064	2	Tungsten ores	1454	1	Fuller's earth
1069	3	Molybdenum, chromium, cobalt and nickel ores	1455	3	Kaolin and ball clay
1081	10J	Metal mining stripping services	1456	4	Feldspar
1082	10J	Metal mining services, except stripping	1457	4	Magnesite and brucite
1092	10K-1	Mercury ores	1459	5	Clay, ceramic, and refractory minerals, n.e.c.
1093 (Rev)	2	Titanium ores	1472	14F-1	Barite
1094	3	Uranium-radium-vanadium ores	1473	2	Fluorspar
1099	1	Metallic ores, n.e.c.	1474	3	Potash, soda, and borate minerals
1111	11B-1	Anthracite	1475	4	Phosphate rock
1112	2	Anthracite stripping services	1476	5	Rock salt
1113	2	Anthracite mining services, except strip mining	1477	6	Sulfur
1211	12A-1	Bituminous coal	1479	7	Chemical and fertilizer mineral mining, n.e.c.
1212	1	Lignite	1481	14G	Nonmetallic minerals stripping services
1213	2	Bituminous coal and lignite stripping and auger mining services	1482	14G	Nonmetallic minerals (except Fuels) services, exc. stripping
1214	2	Bituminous coal and lignite mining services, n.e.c.	1492	14H-1	Gypsum
1311	13B-1	Crude petroleum and natural gas	1493	2	Mica
	2	Offshore oil and gas - Special Report	1494	3	Native asphalt and bitumens
1321	13C	Natural gas liquids	1495	4	Pumice and pumicite
1381	13D-1	Drilling oil and gas wells services	1496	5	Talc, soapstone, and pyrophyllite
1382	2	Oil and gas field explora- tion services	1497	4	Natural abrasives, exc. sand
1389	3	Oil and gas field services, n.e.c.	1498	3	Peat
			1499	6	Miscellaneous nonmetallic minerals, n.e.c.

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1958

Census of Mineral Industries

Preliminary General Statistics

April 1960

MI(P)-1

SUMMARY STATISTICS: INDUSTRY GROUPS AND INDUSTRIES

The value of shipments and receipts of all mineral industries in 1958 amounted to \$18.1 billion, an increase of about 16 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. This total included \$11.6 billion for the Crude Petroleum and Natural Gas Extraction Industries, an increase of 17 percent from 1954; \$2.8 billion for the Coal Mining Industries, an increase of 11 percent from 1954; \$1.9 billion for the Nonmetallic Minerals (Except Fuels) Mining Industries, an increase of 18 percent from 1954; and \$1.8 billion for the Metal Mining Industries, an increase of about 15 percent from 1954. Average employment in the mineral industries showed a decline of 6 percent from 1954 to a total of 735 thousand employees in 1958. Average employment in the major groups of mineral industries in 1958 was: for Crude Petroleum and Natural Gas Extraction Industries, 317 thousand, approximately the same as in 1954; for Coal Mining, 210 thousand, a decrease of 18 percent from 1954; for Nonmetallic Minerals (Except Fuels) Mining, 115 thousand, an increase of 1 percent; and for Metal Mining, 92 thousand, a decrease of 8 percent. Value added in mining in 1958 amounted to \$13.4 billion, an increase of about 16 percent from 1954, amounting for the four major groups of industries in the order specified above to: \$9.1 billion, an increase of 18 percent from 1954; \$1.8 billion, an increase of 9 percent; \$1.4 billion, an increase of 17 percent; and \$1.2 billion, an increase of about 7 percent, respectively.

The figures shown in this report represent industry totals for 1958 and 1954 general

statistics, usually as published in the preliminary industry reports for the 1958 Census of Mineral Industries. No adjustments have been made in the money figures in this report for changes in price levels from 1954 to 1958.

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

INDUSTRY CLASSIFICATION

The definitions of the mining industries used in this Census report are those of the Standard Industrial Classification. These industries represent establishments primarily engaged in the extraction of minerals occurring naturally. They include exploration and development of mineral properties and contract service establishments primarily engaged in work for others on mineral properties. In general, crushing, screening, washing, concentration, and other preparation operations needed to render the material marketable are included, whether or not the preparation plants are located at the mines served. Such activities as smelting of metallic ores, petroleum refining, and production of cement, clay products, and concrete products are excluded and classified in the manufacturing industries.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices 10 cents

Mining operations which are carried on as secondary activities at manufacturing or other nonmining establishments such as stone quarries at cement, lime, and dimension stone dressing plants; sand and gravel pits at ready mixed concrete and concrete products plants; clay pits at structural clay products and pottery plants; and gypsum mines at gypsum products plants are not within the scope of the minerals census. The approximate value of such excluded mineral production in 1958 was \$320 million, all of which represents mineral products for which the primary production is classified in Major Group 14—Nonmetallic Minerals (Except Fuels) Mining.

The minerals census obtained reports for the operations of an entire establishment, showing the output of mineral products; operating and development costs; and labor, materials and supplies, and equipment requirements.

Mining operations were classified by industry on the basis of the value of the principal mineral produced, or if there was no production, on the basis of the principal mineral for which exploration or development was in process. For most mineral industries, secondary products are of little statistical importance. The most significant exceptions are for establishments producing complex ores containing copper, lead, zinc, gold, and silver, and for wells which produce both oil and gas.

The Standard Industrial Classification (SIC) system used in this report is according to the new 1957 edition of the Standard Industrial Classification Manual. It defines 55 individual industries and combines them into 20 industry groups, which are, in turn, combined into 5 major industry groups. Each individual industry is designated by a 4-digit code, each industry group by a 3-digit code identical with the first three digits of its component industries, and each major industry group by a 2-digit code identical with the first two digits of its component industry groups. In addition to these SIC industries and industry groups, subindustry statistics are included in this report, without code designation, for the Lead and Zinc Ores, Crude Petroleum and Natural Gas, Dimension Stone, Crushed and Broken Stone, and Sand and Gravel Industries.

ESTABLISHMENTS

A mineral establishment is generally defined as a single physical location where mineral operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. For oil and gas field operations, only one report was required for all oil and gas field operations of a company for each State. For mineral service operations, in general, only one report was required for all such operations in the United States.

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of the approximately 36,300 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation and if the company activities were substantial in size.

EXPLANATION OF TERMS

All employees, number. --The employment statistics include all production, development, and related workers and all nonproduction personnel at the establishment, including force-account construction workers. For 1958, the figures shown represent an average of the number of all full-time and part-time employees who worked or received pay for any part of the pay period ending nearest the 15th of March, May, August, and November. For 1954, the figures for industries other than Crude Petroleum and Natural Gas Extraction represent an average for 12 mid-month pay periods. (For most such industries, which are highly seasonal, a comparable 12 month average employment will be derived for the 1958 Census for use in the final reports.) The employee figures shown exclude data for proprietors and firm members of unincorporated concerns, whether or not they performed manual labor. The figures for employment in individual mineral commodity industries do not include employees of contractors which performed services such as strip mining and oil and gas well drilling. Separate figures are shown for such contractors under the mineral services industries.

Payroll. --The payroll figures include all forms of compensation (salaries, wages, commissions, bonuses, vacation pay, compensation in kind, and other remunerations paid during the year to all employees of the establishment). They represent payroll prior to such deductions as Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds.

Production and development workers, number. --These figures represent employees up through the working foreman level engaged in manual work, using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mining, development work, storage, shipping, main-

tenance, repair, watchman services, auxiliary production for use at establishment (such as power plant), record keeping, and other services closely associated with the production and development operations of the establishment covered by the report. Gang and straw bosses and foremen who perform manual labor are included as are employees who are paid on either a time or a piece rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners. Supervisory employees above the working foreman level are excluded from this category.

Production and development workers, man-hours. --These figures include all hours actually worked by production and development employees, both on days when the mines were active for production or development work and on inactive days when only watchmen, repairmen, and other maintenance men were on duty. They exclude hours for paid vacations, holidays, or sick leave when the employee was not actually at the mine. They include actual overtime hours, not straight time equivalent hours. Man-hours of working proprietors are excluded.

Production and development workers, wages. --These figures represent that portion of the payroll (as defined above) paid to production and development workers.

Value added in mining. --This measure is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas.

Value of shipments. --These figures represent the value at the establishment of all products physically shipped from the establishment during the year, including material withdrawn for stockpiles, and products shipped on consignment whether or not sold in the year. For each industry this represents the value of all primary products of the industry, the value of secondary products which are primary to other industries, the receipts for work performed for others (except custom milling), and the value of products purchased and resold without further processing. Respondents were

requested to value products transferred to other establishments of the same company for preparation or as a material for manufacturing at their approximate commercial values and not at the cost of production.

The value of shipments figures represent "gross shipments" and contain some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation, as well as the value of the prepared material produced therefrom either for the account of the reporting company or on a custom or toll basis for others. For all mineral industries, this duplication in 1958 amounted to about 9 percent; however, it was more significant in certain industries, amounting to about 15 percent for all metal mining, and to 18 percent for the Copper Ores Industry and 33 percent for the Uranium-Radium-Vanadium Ores Industry, to 28 percent for the Anthracite Industry, to 13 percent for the Bituminous Coal Industry; and amounting to 9 percent for the Crude Petroleum and Natural Gas Extraction Industries.

Capital expenditures. --These figures represent capitalized expenditures made during the year for development and exploration of mineral properties, for new construction, and for new and used machinery that were chargeable to fixed assets accounts of the mining establishments and were of a type for which depreciation or depletion accounts are ordinarily maintained for tax purposes or were charged to capital or Defense Minerals Exploration Administration accounts. For each industry the capitalized expenditures included work done on contract as well as by the mine forces. Excluded are expenditures for land and mineral rights.

1958 CENSUS OF MINERAL INDUSTRIES PROGRAM

Preliminary industry reports, series MIC(P)-10A through 14H-6, are being issued during the period December 1959-May 1960. These reports show comparative summary statistics for the Census years 1958, 1954, 1939, and 1929; summary statistics by States for 1958 with two comparative figures for 1954; and detailed product statistics, usually by State, for 1958 and 1954. A report showing preliminary summary statistics by State for 2-digit industry groups will also be issued shortly. Final industry reports and final State reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

GENERAL STATISTICS FOR ALL MINERAL INDUSTRIES IN THE UNITED STATES,

Code	Industry group and industry	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepa- ration, purchased fuel and electricity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)			
	All mineral industries.....	36,330	6,029	734,994	3,749,221	565,655	1,082,363	2,617,401	13,408,566	6,489,272	949,827
	MAJOR INDUSTRY GROUPS										
10	Metal mining.....	2,181	383	92,441	487,876	71,315	138,483	355,487	1,188,089	789,429	65,591
11	Anthracite mining.....	1,253	160	22,756	93,044	20,056	30,959	79,421	161,541	169,298	9,650
12	Bituminous coal and lignite mining.....	6,941	1,379	187,586	910,818	164,984	269,093	762,368	1,604,160	848,679	139,509
13	Crude petroleum and natural gas extraction.....	18,667	2,686	317,115	1,726,194	213,544	441,532	1,010,367	9,072,185	4,139,058	606,961
14	Nonmetallic minerals (except fuels) mining.....	7,288	1,421	115,096	531,289	95,756	202,296	409,753	1,382,591	542,808	128,116
	INDUSTRIES										
10	Metal mining.....	2,181	383	92,441	487,876	71,315	138,483	355,487	1,188,089	789,429	65,591
1011	Iron ores.....	244	130	31,589	174,414	23,634	42,770	120,630	499,718	205,835	19,396
1021	Copper ores.....	144	38	27,316	142,117	20,861	40,954	106,226	261,465	217,179	17,901
1031	Lead and zinc ores.....	281	51	11,537	56,498	8,682	17,403	38,271	74,255	52,327	2,241
	Lead ores.....	204	25	6,827	33,570	5,414	11,004	24,114	48,214	30,198	1,390
	Zinc ores.....	77	26	4,710	22,928	3,268	6,399	14,157	26,041	22,129	851
104	Gold and silver ores.....	352	20	3,944	20,036	3,408	7,109	17,054	37,825	12,380	1,203
1042	Lode gold.....	228	12	2,595	12,495	2,234	4,632	10,705	22,585	7,705	862
1043	Placer gold.....	65	3	360	1,784	320	725	1,509	4,875	1,641	56
1044	Silver ores.....	59	5	989	5,757	854	1,752	4,840	10,565	3,034	285
1051	Bauxite.....	29	9	665	3,335	502	902	2,288	15,421	2,721	1,483
106	Ferroalloy ores, except vanadium.....	294	35	5,489	26,883	4,406	8,302	19,681	74,604	41,734	1,822
1062	Manganese ores.....	186	24	2,143	9,231	1,815	3,443	7,471	20,435	20,538	750
1064	Tungsten ores.....	32	4	639	2,896	509	974	1,989	8,166	6,283	100
1069	Ferroalloy ores, except vanadium, n.e.c.....	76	7	2,707	14,756	2,082	3,885	10,221	46,003	14,913	972
108	Metal mining services.....	95	23	2,111	11,597	1,973	4,286	10,621	22,909	9,409	1,188
1081	Metal mining stripping services.....	29	6	544	2,594	505	1,018	2,356	8,459	1,642	989
1082	Metal mining services, except stripping.....	66	17	1,567	9,003	1,468	3,268	8,265	14,450	7,767	199
109	Miscellaneous metal ores.....	742	77	9,790	52,996	7,849	16,757	40,716	201,892	247,844	20,357
1092	Mercury ores.....	79	8	652	3,110	569	1,206	2,627	7,136	1,996	311
1093	Titanium ores.....	11	7	958	4,421	706	1,234	2,881	14,458	5,052	151
1094	Uranium-radium-vanadium ores.....	590	60	7,949	44,422	6,394	13,942	34,432	178,606	239,317	19,555
1099	Metallic ores, n.e.c.....	62	2	231	1,043	180	375	776	1,692	1,479	360
11	Anthracite mining.....	1,253	160	22,756	93,044	20,056	30,959	79,421	161,541	169,298	9,650
1111	Anthracite.....	1,167	118	19,649	79,098	17,269	26,481	67,422	138,735	156,857	6,282
1112	Anthracite stripping services.....	80	42	3,060	13,740	2,743	4,414	11,803	22,559	12,384	3,269
1113	Anthracite mining services, except strip mining.....	6	...	47	206	44	64	196	267	57	99
12	Bituminous coal and lignite mining.....	6,941	1,379	187,586	910,818	164,984	269,093	762,368	1,604,160	848,679	139,509
1211	Bituminous coal.....	6,726	1,351	185,564	900,853	163,169	265,760	753,641	1,579,873	840,866	135,080
1212	Lignite.....	58	8	510	2,692	437	844	2,261	9,307	1,636	1,522
1213	Bituminous coal and lignite stripping and auger mining services.....	137	18	1,315	6,404	1,195	2,119	5,652	13,480	5,398	2,737
1214	Bituminous coal and lignite mining services, n.e.c.....	20	2	197	868	183	370	614	1,500	779	170
13	Crude petroleum and natural gas extraction.....	18,667	2,686	317,115	1,726,194	213,544	441,532	1,010,367	9,072,185	4,139,058	606,961
1311	Crude petroleum and natural gas.....	12,170	1,089	185,065	1,073,821	102,369	202,333	497,462	7,382,259	2,508,676	437,054
	Crude petroleum.....	10,787	973	169,312	994,382	92,281	182,482	452,837	6,864,411	2,250,306	392,866
	Natural gas.....	1,383	116	15,753	79,439	10,088	19,851	44,625	517,848	258,370	44,188
1321	Natural gas liquids.....	589	289	15,893	92,502	13,396	26,871	75,447	582,748	1,090,838	40,511
138	Oil and gas field services.....	5,908	1,308	116,157	559,871	97,779	212,328	437,458	1,176,178	539,544	129,396
1381	Drilling oil and gas wells.....	3,074	820	59,456	288,908	52,143	109,692	239,051	560,997	334,172	84,766
1382	Oil and gas field exploration services.....	344	77	9,539	43,601	7,496	16,718	31,680	64,295	23,878	6,073
1389	Oil and gas field services, n.e.c.....	2,490	411	47,162	227,362	38,140	85,918	167,327	454,886	181,494	38,555

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

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BY INDUSTRY GROUP AND INDUSTRY: 1958 AND 1954

1958--Continued				1954											Code
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work ¹	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures		
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
														(\$1,000)	
18,079,954	2,767,711	37,446	6,194	785,708	3,385,722	647,141	1,248,898	2,572,297	² 11,546,418	³ 5,464,230	1,213,108	² 15,489,383	2,723,756		
1,828,512	214,597	3,496	409	100,250	463,025	81,896	168,346	353,303	² 1,075,519	³ 575,512	86,891	² 1,506,238	221,067	10	
323,915	16,574	1,436	245	37,462	135,929	33,026	48,266	113,932	196,835	212,820	9,270	408,431	10,494	11	
2,426,977	165,371	6,855	1,463	218,833	874,305	199,655	325,769	764,863	1,418,384	646,970	121,640	2,068,183	118,811	12	
11,629,821	2,188,383	17,585	2,766	315,735	1,462,443	235,483	491,718	976,595	⁴ 7,673,694	⁴ 3,613,756	863,205	⁴ 9,924,339	2,226,316	13	
1,870,729	182,786	8,074	1,311	113,428	450,020	97,081	214,799	363,604	1,181,986	415,172	132,102	1,582,192	147,068	14	
1,828,512	214,597	3,496	409	100,250	463,025	81,896	168,346	353,303	² 1,075,519	³ 575,512	86,891	² 1,506,238	221,067	10	
681,902	43,047	225	135	34,170	156,909	28,216	53,288	119,688	435,668	159,534	36,994	547,218	84,978	1011	
450,750	45,795	210	41	27,813	136,065	21,544	46,676	98,491	334,876	232,242	23,821	508,729	82,210	1021	
120,316	8,507	520	90	16,566	71,363	13,592	27,554	53,676	107,409	74,116	5,942	175,947	11,520	1031	
75,364	4,438	343	41	8,720	39,002	7,156	14,654	29,549	62,713	34,443	2,878	94,874	5,160		
44,952	4,069	177	49	7,846	32,361	6,436	12,900	24,127	44,696	39,673	3,064	81,073	6,360		
48,329	3,079	535	21	4,831	20,618	4,200	9,363	17,406	35,354	13,316	1,658	46,581	3,747	104	
29,464	1,688	298	14	3,020	12,269	2,634	5,894	10,406	21,884	7,900	910	28,517	2,177	1042	
6,319	253	136	4	556	2,311	501	1,255	1,997	3,614	2,504	302	5,916	504	1043	
12,546	1,138	101	3	1,255	6,038	1,065	2,214	5,003	9,856	2,912	446	12,148	1,066	1044	
18,217	1,408	25	6	852	3,581	661	1,288	2,529	12,827	3,946	356	16,819	310	1051	
111,546	6,614	1,086	51	8,078	38,535	6,838	15,122	31,330	107,399	53,316	8,475	153,671	15,519	106	
39,422	2,301	367	24	2,604	9,292	2,266	4,293	7,643	18,118	15,240	2,304	32,398	3,264	1062	
14,430	119	549	20	2,987	14,758	2,635	6,327	13,148	40,744	22,757	3,562	60,737	6,326	1064	
57,694	4,194	170	7	2,487	14,485	1,937	4,502	10,539	48,537	15,319	2,609	60,536	5,929	1069	
32,363	1,143	114	26	3,059	15,268	2,863	6,519	13,933	26,703	12,327	2,049	38,679	2,400	108	
10,264	826	24	26	1,173	5,691	2,863	2,722	13,933	13,071	7,925	1,011	20,545	1,462	1081	
22,099	317	90	26	1,886	9,577	2,863	3,797	13,933	13,632	4,402	1,038	18,134	958	1082	
365,089	105,004	781	39	4,881	20,686	3,982	8,536	16,250	² 15,283	³ 26,715	7,596	² 18,594	20,383	109	
8,592	851	87	5	453	1,972	372	841	1,607	3,355	1,453	226	4,519	515	1092	
17,158	2,483	10	6	843	3,699	568	1,261	2,397	11,134	4,328	1,286	12,750	3,998	1093	
336,334	101,144	637	26	3,467	14,568	2,944	6,227	11,908	(NA)	³ 20,074	5,336	(NA)	14,793	1094	
3,005	526	47	2	118	447	98	207	338	794	860	748	1,325	1,077	1099	
323,915	16,574	1,436	245	37,462	135,929	33,026	48,266	113,932	196,835	212,820	9,270	408,431	10,494	11	
289,131	12,743	1,291	186	32,769	118,070	28,823	42,061	98,678	167,090	200,663	5,667	365,536	7,884	1111	
34,461	3,751	132	56	4,556	17,380	4,074	6,038	14,809	29,079	11,977	3,529	42,048	2,537	1112	
323	100	13	3	137	479	129	167	445	666	180	74	847	73	1113	
2,426,977	165,371	6,855	1,463	218,833	874,305	199,655	325,769	764,863	1,418,384	646,970	121,640	2,068,183	118,811	12	
2,394,535	161,284	6,643	1,434	216,813	865,649	197,819	322,410	757,175	1,396,774	640,706	118,481	2,040,200	115,761	1211	
11,033	1,432	60	9	574	2,588	505	901	2,177	9,093	1,326	607	10,387	639	1212	
19,130	2,485	137	20	1,284	5,300	1,196	2,202	4,923	11,190	4,560	2,509	15,960	2,299	1213	
2,279	170	15		162	768	135	256	588	1,327	378	43	1,636	112	1214	
11,629,821	2,188,383	17,585	2,766	315,735	1,462,443	235,483	491,718	976,595	⁴ 7,673,694	⁴ 3,613,756	863,205	⁴ 9,924,339	2,226,316	13	
8,385,798	1,942,191	11,508	1,042	172,506	835,740	109,792	216,581	459,955	6,129,213	2,218,290	621,048	7,070,097	1,898,454	1311	
7,801,171	1,706,412	10,101	1,042	161,282	790,946	101,542	201,086	430,497	5,741,256	2,083,668	583,211	6,642,452	1,770,683		
584,627	235,779	1,407		11,224	44,794	8,250	15,495	29,458	387,957	134,622	32,837	427,645	127,771		
1,620,183	94,914	562	287	17,340	85,057	13,560	27,862	63,983	(NA)	⁵ 143,327	65,752	⁶ 40,422	109,959	1321	
1,623,840	151,278	5,515	1,437	125,889	541,646	112,131	247,275	452,657	1,118,544	553,974	176,405	1,651,020	217,903	138	
903,972	101,963	2,869	878	67,976	304,312	62,145	133,216	264,797	623,967	381,861	120,385	972,745	153,468	1381	
87,163	7,083	330	1	11,488	49,467	10,010	23,978	40,813	81,301	33,719	6,537	114,815	6,742	1382	
632,705	42,232	2,316	559	46,425	187,867	39,976	90,081	147,047	413,276	138,394	49,483	543,460	57,693	1389	

Code	Industry group and industry	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepara- tion, purcha- sed fuel and electric- ity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll	Number	Man-hours	Wages			
					(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	INDUSTRIES--Continued										
14	Nonmetallic minerals (except fuels) mining.....	7,288	1,421	115,096	531,289	95,756	202,296	409,758	1,382,591	542,808	128,116
1411	Dimension stone.....	332	29	2,299	7,086	2,055	3,736	6,011	13,034	3,419	590
	Dimension limestone.....	75	8	599	2,197	514	920	1,645	3,923	671	336
	Dimension granite.....	76	12	737	2,255	679	1,279	2,018	4,030	1,619	125
	Dimension stone, n.e.c.....	185	9	965	2,634	862	1,537	2,348	5,081	1,129	129
1421	Crushed and broken stone.....	1,974	643	40,629	181,955	35,004	76,056	147,507	445,704	188,027	50,859
	Crushed and broken limestone.....	1,466	482	30,699	137,118	26,489	57,434	111,674	335,880	140,195	38,489
	Crushed and broken granite.....	115	60	3,260	12,708	2,867	6,409	10,500	32,378	14,798	5,846
	Crushed and broken stone, n.e.c.....	393	101	6,670	32,129	5,648	12,213	25,333	77,446	33,034	6,524
1441	Sand and gravel.....	3,671	480	36,154	167,172	30,715	65,424	134,508	432,923	143,367	37,784
	Common sand and gravel.....	3,501	447	33,382	154,787	28,399	60,645	124,863	400,546	130,521	34,541
	Glass sand.....	46	18	1,630	7,504	1,341	2,843	5,737	20,325	8,420	2,518
	Molding sand.....	124	15	1,142	4,881	975	1,936	3,908	12,052	4,426	925
145	Clay, ceramic, and refractory minerals	490	112	9,153	36,126	7,413	15,055	26,864	87,758	39,014	8,968
1452	Bentonite.....	41	15	686	2,884	543	1,145	1,993	12,268	4,699	976
1453	Fire clay.....	182	19	1,473	6,015	1,280	2,234	4,985	14,400	4,518	1,685
1454	Fuller's earth.....	14	6	652	2,400	527	1,147	1,674	6,058	3,040	174
1455	Kaolin and ball clay.....	53	26	3,659	14,011	2,722	5,681	9,727	31,403	12,524	2,816
1456	Feldspar.....	74	10	563	1,898	496	1,035	1,512	4,559	2,549	1,260
1457	Magnesite and brucite.....	4	3	337	1,925	267	529	1,386	5,976	2,167	114
1459	Clay, ceramic, and refractory minerals, n.e.c.....	122	33	1,803	6,993	1,578	3,284	5,587	13,094	9,717	1,943
147	Chemical and fertilizer mineral mining	271	101	20,017	111,769	14,831	30,468	74,439	334,815	144,984	23,244
1472	Barite.....	53	8	933	3,424	782	1,608	2,707	11,273	3,161	160
1473	Fluorspar.....	55	12	1,235	5,614	1,044	2,010	4,334	12,617	8,111	805
1474	Potash, soda, and borate minerals...	21	14	6,136	37,043	4,590	9,213	26,744	111,082	34,470	6,919
1475	Phosphate rock.....	65	36	5,402	27,140	3,961	8,386	17,103	64,366	67,323	6,057
1476	Rock salt.....	22	11	1,955	10,867	1,593	3,501	7,930	33,884	8,039	2,110
1477	Sulfur.....	24	13	3,678	24,567	2,303	4,651	13,264	94,003	21,342	7,077
1479	Chemical and fertilizer mineral mining, n.e.c.....	31	7	678	3,114	558	1,099	2,357	7,590	2,538	116
148	Nonmetallic minerals (except fuels) services.....	74	2	1,081	3,369	1,011	1,843	2,910	6,128	1,659	564
1481	Nonmetallic minerals stripping services.....	46	1	622	1,880	582	1,064	1,609	3,876	1,023	387
1482	Nonmetallic minerals (except fuels) services, except stripping.....	28	1	459	1,489	429	779	1,301	2,252	636	177
149	Miscellaneous nonmetallic minerals (except fuels).....	476	54	5,763	23,812	4,727	9,714	17,519	62,229	22,338	6,107
1492	Gypsum.....	33	5	503	2,134	434	932	1,653	6,800	1,613	695
1493	Mica.....	148	7	726	1,996	648	1,305	1,697	4,669	1,763	730
1494	Native asphalt and bitumens.....	10	5	464	2,264	367	732	1,397	5,959	2,287	517
1495	Pumice and pumicite.....	64	2	326	1,096	271	413	900	3,490	1,682	248
1496	Talc, soapstone, and pyrophyllite...	64	12	1,331	5,411	1,124	2,302	4,155	11,694	3,577	496
1497	Natural abrasives, except sand.....	20	3	231	1,016	204	409	798	2,655	766	84
1498	Peat.....	82	3	389	1,279	335	623	971	3,596	1,080	479
1499	Miscellaneous nonmetallic minerals, n.e.c.....	55	17	1,793	8,616	1,344	3,000	5,948	23,366	9,570	2,858

NA Not available.

¹Includes the cost of products purchased for resale without further processing.²Excludes figures for the Uranium-Radium-Vanadium Ores Industry, for which value of shipments and cost of minerals received for preparation were not collected in the 1954 Census. It is estimated, on the basis of figures in the forthcoming chapter on Uranium of the 1959 Minerals Yearbook (United States Department of the Interior, Bureau of Mines), that the gross value of shipments of the Uranium-Radium-Vanadium Ores Industry in 1954 should have been between \$70 and \$90 million, and that the value added in mining should have been between \$20 and \$40 million.³Excludes cost of minerals received for preparation by the Uranium-Radium-Vanadium Ores Industry. The value of minerals received for preparation by this industry in 1958 was \$109,452 thousand and it is estimated on the basis of the source indicated in footnote 2 that for 1954 it amounted to between \$30 and \$50 million.

BY INDUSTRY GROUP AND INDUSTRY: 1958 AND 1954--Continued

1958--Continued		1954												Code
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work ¹	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages						
(\$1,000)	(\$1,000)				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	
1,870,729	182,786	8,074	1,311	113,428	450,020	97,081	214,799	363,604	1,181,986	415,172	132,102	1,582,192	147,068	14
15,787	1,256	351	46	3,224	8,625	3,068	5,895	7,938	15,155	3,846	891	18,945	947	1411
4,407	523	65	11	500	1,556	472	872	1,429	2,942	779	158	3,754	125	
5,553	221	86	15	967	2,639	917	1,769	2,404	4,590	1,167	226	5,738	245	
5,827	512	200	20	1,757	4,430	1,679	3,252	4,105	7,623	1,900	507	9,453	577	
617,119	67,471	1,901	529	37,404	145,196	33,124	75,559	122,499	337,611	127,885	44,701	465,254	44,943	1421
460,564	54,000	1,447	388	28,240	107,818	24,925	56,335	90,715	239,604	88,504	32,622	328,757	31,973	
48,552	4,470	101	40	2,550	8,879	2,344	5,607	7,573	22,201	8,820	3,041	30,875	3,187	
108,003	9,001	353	101	6,614	28,499	5,855	13,617	24,211	75,806	30,561	9,038	105,622	9,783	
561,214	52,860	3,931	454	36,466	147,313	30,533	70,103	118,966	356,729	107,679	47,694	466,015	46,087	1441
516,469	49,139	3,756	426	34,090	138,558	28,423	65,600	111,600	334,046	99,955	45,825	435,662	44,164	
28,371	2,692	44	20	1,295	5,098	1,144	2,505	4,279	13,701	5,021	965	18,591	1,096	
16,374	1,029	131	8	1,081	3,657	966	1,998	3,087	8,982	2,703	904	11,762	827	
123,037	12,703	632	111	8,232	26,504	7,463	15,377	22,490	78,449	27,873	6,508	103,768	9,062	145
16,884	1,059	43	16	634	2,135	578	1,340	1,920	16,350	5,518	604	21,830	642	1452
18,572	2,031	248	29	1,987	6,598	1,802	3,123	5,670	17,468	4,773	1,292	22,206	1,327	1453
8,692	580	16	6	564	1,744	510	1,109	1,381	4,179	1,819	539	6,012	525	1454
42,735	4,008	54	28	3,148	9,943	2,820	6,159	8,115	25,249	8,333	2,601	31,892	4,291	1455
6,879	1,289	84	10	616	1,722	579	1,235	1,523	4,048	2,735	294	6,669	408	1456
7,270	987	4	2	132	539	121	237	469	1,372	283	17	1,655	17	1457
22,005	2,749	183	20	1,151	3,823	1,053	2,174	3,412	9,783	4,412	1,161	13,504	1,852	1459
464,216	38,827	317	114	21,609	99,391	17,295	36,418	73,324	340,520	128,653	26,054	457,586	37,641	147
13,765	829	44	11	1,125	3,874	1,036	2,403	3,451	14,051	3,980	1,250	18,269	1,012	1472
19,977	1,556	104	15	1,260	4,866	997	2,001	3,451	9,914	5,735	561	15,461	749	1473
141,112	11,359	20	13	6,322	33,439	4,738	9,381	23,028	82,213	26,210	8,390	107,757	9,056	1474
132,089	5,657	75	39	5,440	21,529	4,579	10,119	17,089	62,089	59,069	8,156	117,976	11,338	1475
41,431	2,602	15	12	1,925	8,571	1,659	3,861	7,117	30,013	6,297	1,534	35,658	2,186	1476
106,200	16,222	20	13	4,095	21,186	3,077	6,229	14,619	124,166	22,561	2,803	140,685	8,845	1477
9,642	602	39	11	1,442	5,926	1,209	2,424	4,569	18,074	4,801	3,360	21,780	4,455	1479
7,659	692	62	4	639	2,327	614	1,258	2,214	4,884	1,666	402	6,571	381	148
4,782	504	42	4	294	1,031	614	569	2,214	2,251	859	268	3,124	254	1481
2,877	188	20	4	345	1,296	614	689	2,214	2,633	807	134	3,447	127	1482
81,697	8,977	880	53	5,854	20,664	4,984	10,191	16,173	48,638	17,570	5,852	64,053	8,007	149
8,250	858	37	5	449	1,852	399	926	1,567	5,352	1,307	2,395	6,631	2,423	1492
6,174	988	498	6	710	1,342	668	1,196	1,255	3,284	1,228	474	4,126	860	1493
8,040	723	12	7	551	2,147	451	987	1,443	4,857	1,643	476	6,424	552	1494
4,983	437	75	1	267	962	223	440	748	2,741	769	298	3,393	415	1495
14,899	868	68	13	1,471	4,940	1,297	2,778	4,141	9,486	3,044	486	11,819	1,197	1496
3,369	136	32	4	285	1,161	251	524	932	3,681	1,068	123	4,474	398	1497
4,373	782	88	3	353	940	321	637	829	1,800	572	159	2,326	205	1498
31,609	4,185	70	14	1,768	7,320	1,374	2,703	5,258	17,437	7,939	1,441	24,860	1,957	1499

¹For natural gas liquids plants in 1954, data were collected on the quantity but not on the cost of gas received for processing and on the value of residue gas shipped. Such cost and value figures have been estimated and included in the 2-digit group and all industries totals, permitting computation of value added.

²Excludes the cost of gas received for processing.

³Excludes the value of residue gas shipped.

1958 Census Mineral Industries

Preliminary General Statistics

May 1960

MIC(P)-2

SUMMARY STATISTICS: GEOGRAPHIC DIVISIONS AND STATES

The largest mineral producing State in 1958, as in 1954, was Texas, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. The value of shipments in Texas in 1958 was \$5.0 billion, amounting to 28 percent of the total for all States. Average employment in Texas was 137 thousand, 19 percent of the total for all States; and value added in mining was \$3.9 billion, 29 percent of the all States total. In terms of value of shipments the second ranking State was Louisiana, with shipments of \$1.9 billion, employment 46 thousand, and value added \$1.5 billion. The next ten ranking States in order of importance, as measured by value of shipments, were California, Pennsylvania, West Virginia, Oklahoma, New Mexico, Illinois, Kansas, Kentucky, Utah, and Minnesota. In terms of employment, the ranking was somewhat different, reflecting the higher labor requirements per dollar of shipments for coal mining than for oil and gas field operations. Pennsylvania ranked second in employment, with 74 thousand employees, shipments of \$1.0 billion, and value added of \$0.6 billion. The next ten ranking States in terms of employment were West Virginia, Louisiana, Oklahoma, Kentucky, California, Illinois, Ohio, Virginia, New Mexico, and Minnesota.

For metal mining the first three ranking States in terms of value of shipments were Minnesota, Utah, and Arizona and in terms of employment Minnesota, Arizona, and Michigan. The State of Minnesota, with value of metal mines shipments of \$0.4 billion, accounted for 22 percent of all shipments by metal mining operations in 1958, as it did in 1954. The next five ranking metal mining States in terms of value of shipments were Colorado, New Mexico, Michigan, Montana, and Alabama.

For coal mining the first three ranking States in terms of value of shipments and employment were West Virginia, Pennsylvania, and Kentucky. Value of shipments for coal mining establishments in West Virginia and Pennsylvania each amounted to \$0.8 billion, the two States accounting for 57 percent of the value of shipments for coal mining in all States. The next

five ranking coal mining States in terms of value of shipments were Illinois, Ohio, Alabama, Indiana, and Utah.

For crude petroleum and natural gas extraction the first three ranking States, in terms of value of shipments, were Texas, Louisiana, and California, and in terms of employment Texas, Louisiana, and Oklahoma. Texas accounted for 42 percent of the shipments for these industries in all States, with total shipments of \$4.9 billion. The next five ranking States in terms of value of shipments for these industries were Oklahoma, Kansas, New Mexico, Illinois, and Wyoming.

For the nonmetallic minerals (except fuels) mining industries, the first three ranking States in terms of value of shipments were California, Florida, and Texas, and in terms of employment California, Illinois, and Texas. However, California shipments for these industries amounted to only \$0.2 billion, or 10 percent of the total for all States. The next five States in terms of value of shipments were Illinois, New York, Pennsylvania, Ohio, and New Mexico.

The figures shown in this report represent industry group totals by State for 1958 and 1954 general statistics, usually as published in different detail in the preliminary industry reports for the 1958 Census of Mineral Industries. No adjustments have been made in the money figures in this report for changes in price levels from 1954 to 1958.

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

INDUSTRY CLASSIFICATION

The definitions of the mining industries used in this Census report are those of the Standard Industrial Classification. These industries represent establishments primarily engaged in the extraction of minerals occurring naturally. They include exploration and development of mineral properties and contract service establishments primarily engaged in work for others on mineral properties. In general, crushing, screening, washing, concentration, and other preparation operations needed to render the material marketable are included, whether or not the preparation plants are located at the mines served. Such activities as smelting of metallic ores, petroleum refining, and production of cement, clay products, and concrete products are excluded and classified in the manufacturing industries.

Mining operations which are carried on as secondary activities at manufacturing or other nonmining establishments such as stone quarries at cement, lime, and dimension stone dressing plants; sand and gravel pits at ready mixed concrete and concrete products plants; clay pits at structural clay products and pottery plants; and gypsum mines at gypsum products plants are not within the scope of the minerals census. The approximate value of such excluded mineral production in 1958 was \$320 million, all of which represents mineral products for which the primary production is classified in Major Group 14--Non-metallic Minerals (Except Fuels) Mining.

The minerals census obtained reports for the operations of an entire establishment, showing the output of mineral products; operating and development costs; and labor, materials and supplies, and equipment requirements.

Mining operations were classified by industry on the basis of the value of the principal mineral produced, or if there was no production, on the basis of the principal mineral for which exploration or development was in process. For most mineral industries, secondary products are of little statistical importance.

The Standard Industrial Classification (SIC) system used in this report is according to the new 1957 edition of the Standard Industrial Classification Manual. It combines industries into 5 major industry groups.

ESTABLISHMENTS

A mineral establishment is generally defined as a single physical location where mineral operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. For oil and gas field operations, only one report was required for all oil and gas field operations of a company for each State. For mineral service operations, in general, only one report was required for all such operations in the United States.

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of the approximately 36,300 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation and if the company activities were substantial in size.

EXPLANATION OF TERMS

All employees, number.--The employment statistics include all production, development, and related workers and all nonproduction personnel at the establishment, including force-account construction workers. For 1958, the figures shown represent an average of the number of all full-time and part-time employees who worked or received pay for any part of the pay period ending nearest the 15th of March, May, August, and November. For 1954, the figures for industries other than Crude Petroleum and Natural Gas Extraction represent an average for 12 mid-month pay periods. (For most such industries, which are highly seasonal, a comparable 12 month average employment will be derived for the 1958 Census for use in the final reports.) The employee figures shown exclude data for proprietors and firm members of unincorporated concerns, whether or not they performed manual labor.

Payroll.--The payroll figures include all forms of compensation (salaries, wages, commissions, bonuses, vacation pay, compensation in kind, and other remunerations paid during the year to all employees of the establishment). They represent payroll prior to such deductions as Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds.

Production and development workers, number.--These figures represent employees up through the working foreman level engaged in manual work, using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mining, development work, storage, shipping, maintenance, repair, watchman services, auxiliary production for use at establishment (such as power plant), record keeping, and other services closely associated with the production and development operations of the establishment covered by the report. Gang and straw bosses and foremen who perform manual labor are included as are employees who are paid on either a time or a piece rate basis. Also included are miners paid on a per ton, car, or yard basis and the men engaged by them and paid out of the total amount received by these miners. Supervisory employees above the working foreman level are excluded from this category.

Production and development workers, man-hours.--These figures include all hours actually worked by production and development employees, both on days when the mines were active for production or development work and on inactive days when only watchmen, repairmen, and other maintenance men were on duty. They exclude hours for paid vacations, holidays, or sick leave when the employee was not actually at the mine. They include actual overtime hours, not straight time equivalent hours. Man-hours of working proprietors are excluded.

Production and development workers, wages.--These figures represent that portion of the payroll (as defined above) paid to production and development workers.

Value added in mining.--This measure is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas.

Value of shipments.--These figures represent the value at the establishment of all products physically shipped from the establishment during the year, including material withdrawn for stockpiles, and products shipped on consignment whether or not sold in the year. For each industry this represents the value of all primary products of the industry, the value of secondary products which are primary to other industries, the receipts for work performed for others (except custom milling), and the value of products purchased and resold without further processing. Respondents were requested to value products transferred to other establishments of the same company for preparation or as a material for manufacturing at their approximate commercial values and not at the cost of production.

The value of shipments figures represent "gross shipments" and contain some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation, as well as the value of the prepared material produced therefrom either for the account of the reporting company or on a custom or toll basis for others. For all mineral industries, this duplication in 1958 amounted to about 9 percent; however, it was more significant in certain industries, amounting to about 15 percent for Metal Mining, to 25 percent for Anthracite Mining, to 12 percent for Bituminous Coal and Lignite Mining, and amounting to 9 percent for the Crude Petroleum and Natural Gas Extraction Industries.

Capital expenditures.--These figures represent capitalized expenditures made during the year for development and exploration of mineral properties, for new construction, and for new and used machinery that were chargeable to fixed assets accounts of mining establishments and were of a type for which depreciation or depletion accounts are ordinarily maintained for tax purposes or were charged to capital or Defense Minerals Exploration administration accounts. For each industry the capitalized expenditures included work done on contract as well as by the mine forces. Excluded are expenditures for land and mineral rights.

1958 CENSUS OF MINERAL INDUSTRIES PROGRAM

Preliminary industry reports, series MIC(P)-10A through 14H-6, are being issued during the period December 1959-May 1960. These reports show comparative summary statistics for the Census years 1958, 1954, 1939, and 1929; summary statistics by States for 1958 with two comparative figures for 1954; and detailed product statistics, usually by State, for 1958 and 1954. A report showing preliminary summary statistics by industry groups and industries has also been issued. Final industry reports and final State reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

Code	Geographic division or State and major industry group	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepa- ration, purchased fuel and electricity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)			
	United States, total.....	36,330	6,029	734,994	3,749,221	565,655	1,082,363	2,617,401	13,408,566	6,489,272	949,827
10	Metal mining.....	2,181	383	92,441	487,876	71,315	138,483	355,487	1,188,089	789,429	65,591
11	Anthracite mining.....	1,253	160	22,756	93,044	20,056	30,959	79,421	161,541	169,298	9,650
12	Bituminous coal and lignite mining..	6,941	1,379	187,586	910,818	164,984	269,093	762,368	1,604,160	848,679	139,509
13	Crude petroleum and natural gas extraction.....	18,667	2,686	317,115	1,726,194	213,544	441,532	1,010,367	9,072,185	4,139,058	606,961
14	Nonmetallic minerals (except fuels) mining.....	7,288	1,421	115,096	531,289	95,756	202,296	409,758	1,382,591	542,808	128,116
	New England, total.....	337	40	3,296	15,164	2,760	5,728	11,723	32,262	12,780	2,614
10	Metal mining.....	4	1	42	281	36	65	253	516	135	...
14	Nonmetallic minerals (except fuels) mining.....	333	39	3,254	14,883	2,724	5,663	11,470	31,746	12,645	2,614
	Maine ⁵	7	2	302	996	265	548	877	2,094	972	237
	New Hampshire ⁶	35	3	223	903	192	389	678	1,944	782	175
	Vermont ⁵	40	7	789	3,200	671	1,348	2,515	6,743	3,050	315
	Massachusetts ⁷	109	12	997	4,860	814	1,727	3,875	10,631	3,689	963
	Rhode Island ⁷	17	3	144	576	129	218	445	1,364	311	159
	Connecticut ⁵	79	13	841	4,629	689	1,498	3,333	9,486	3,976	765
	Middle Atlantic, total.....	4,498	639	87,220	416,933	72,808	125,475	324,654	732,553	453,404	65,266
10	Metal mining.....	25	19	6,658	36,555	4,197	7,959	21,834	52,185	31,317	2,894
11	Anthracite mining.....	1,253	160	22,756	93,044	20,056	30,959	79,421	161,541	169,298	9,650
12	Bituminous coal mining.....	1,371	237	37,209	184,046	32,291	52,675	150,414	294,052	163,564	32,157
13	Crude petroleum and natural gas extraction.....	1,064	50	6,571	29,402	5,157	10,100	20,014	58,401	28,866	4,747
14	Nonmetallic minerals (except fuels) mining.....	785	173	14,026	73,886	11,107	23,782	52,971	166,374	60,359	15,818
	New York, total.....	539	69	9,889	58,241	6,552	14,008	34,498	117,528	39,676	6,115
10	Metal mining.....	12	9	3,591	20,475	1,841	3,730	9,950	33,092	16,306	391
13	Crude petroleum and natural gas extraction.....	237	7	1,115	6,569	685	1,374	2,470	7,860	3,461	425
14	Nonmetallic minerals (except fuels) mining.....	290	53	5,183	31,197	4,026	8,904	22,078	76,576	19,909	5,299
	New Jersey ⁵	137	41	3,514	18,384	2,743	5,562	13,355	37,642	12,553	2,238
	Pennsylvania, total.....	3,822	529	73,817	340,308	63,513	105,905	276,801	577,383	401,175	56,913
11	Anthracite mining.....	1,253	160	22,756	93,044	20,056	30,959	79,421	161,541	169,298	9,650
12	Bituminous coal mining.....	1,371	237	37,209	184,046	32,291	52,675	150,414	294,052	163,564	32,157
13	Crude petroleum and natural gas extraction.....	827	43	5,456	22,833	4,472	8,726	17,544	50,541	25,405	4,322
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	371	89	8,396	40,385	6,694	13,545	29,422	71,249	42,908	10,784
14											
	East North Central, total.....	4,306	659	74,249	380,658	60,839	114,428	291,898	938,935	438,155	69,459
10	Metal mining.....	60	42	9,981	52,535	8,042	13,951	40,691	88,742	54,290	3,600
12	Bituminous coal mining.....	624	201	25,157	142,753	21,535	38,328	116,352	284,389	130,756	24,014
13	Crude petroleum and natural gas extraction.....	1,928	156	16,420	74,743	12,533	23,057	49,879	305,107	165,434	20,340
14	Nonmetallic minerals (except fuels) mining.....	1,694	260	22,691	110,627	18,729	39,092	84,976	260,697	87,675	21,505
	Ohio, total.....	1,435	188	20,508	106,130	15,838	29,902	73,095	191,133	103,900	19,330
12	Bituminous coal mining.....	392	97	9,953	53,507	8,295	14,584	41,488	100,279	67,570	9,576
13	Crude petroleum and natural gas extraction.....	586	18	3,923	19,585	2,295	4,180	8,097	23,748	15,083	3,228
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	457	73	6,632	33,038	5,248	11,138	23,510	67,106	21,247	6,526
14											
	Indiana, total.....	721	94	8,678	42,969	7,057	13,032	32,332	103,209	35,796	8,631
12	Bituminous coal mining.....	92	34	4,114	22,866	3,416	5,755	18,250	45,298	15,153	2,337
13	Crude petroleum and natural gas extraction.....	354	14	1,649	6,951	1,208	2,051	4,060	28,863	10,024	2,193
14	Nonmetallic minerals (except fuels) mining.....	275	46	2,915	13,152	2,433	5,226	10,022	29,048	10,619	4,101

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

5

BY GEOGRAPHIC DIVISION AND STATE: 1958 AND 1954

1958--Continued		1954												Code
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work ¹	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages						
(\$1,000)	(\$1,000)				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	
18,079,954	2,767,711	37,446	6,194	785,708	3,385,722	647,141	1,248,898	2,572,297	² 11,546,418	³ 5,464,230	1,213,108	² 15,489,383	2,723,756	
1,828,512	214,597	3,496	409	100,250	463,025	81,896	168,346	353,303	² 1,075,519	³ 575,512	86,891	² 1,506,238	221,067	10
323,915	16,574	1,436	245	37,462	135,929	33,026	48,266	113,932	196,835	212,820	9,270	408,431	10,494	11
2,426,977	165,371	6,855	1,463	218,833	874,305	199,655	325,769	764,863	1,418,384	646,970	121,640	2,068,183	118,811	12
11,629,821	2,188,383	17,585	2,766	315,735	1,462,443	235,483	491,718	976,595	⁴ 7,673,694	⁴ 3,613,756	863,205	⁴ 9,924,339	2,226,316	13
1,870,729	182,786	8,074	1,311	113,428	450,020	97,081	214,799	363,604	1,181,986	415,172	132,102	1,582,192	147,068	14
43,944	3,712	385	40	4,069	15,683	3,456	7,581	12,434	32,104	10,109	3,404	41,325	4,292	
651	...	7	1	217	957	200	487	822	1,697	726	56	2,393	86	10
43,293	3,712	378	39	3,852	14,726	3,256	7,094	11,612	30,407	9,383	3,348	38,932	4,206	14
2,913	390	66	3	314	930	292	614	861	1,809	486	239	2,175	359	
2,708	193	39	3	266	855	240	481	723	1,658	406	178	1,980	262	
9,550	558	42	11	1,329	4,943	1,187	2,633	4,153	10,600	3,913	600	14,427	686	
14,058	1,225	127	13	1,207	4,945	992	2,142	3,772	8,925	2,682	1,635	11,577	1,665	
1,620	214	20	3	163	565	140	274	461	1,109	393	166	1,447	221	
13,095	1,132	91	7	790	3,445	605	1,437	2,464	8,003	2,229	586	9,719	1,099	
1,159,664	91,559	5,320	782	120,795	483,943	105,017	177,172	392,232	² 767,158	³ 474,889	68,629	² 1,235,113	75,539	
79,838	6,558	31	20	7,417	39,836	5,152	10,003	22,918	² 47,357	³ 25,859	5,063	² 72,753	5,502	10
323,915	16,574	1,436	245	37,462	135,929	33,026	48,266	113,932	196,835	212,820	9,270	408,431	10,494	11
457,040	32,733	1,607	283	51,219	204,608	46,295	74,440	175,686	300,452	147,562	28,901	454,632	22,283	12
76,649	15,365	1,412	56	10,289	39,893	8,148	16,135	27,905	⁴ 73,780	⁴ 46,168	7,646	⁴ 106,520	21,074	13
222,222	20,329	834	178	14,408	63,677	12,396	28,328	51,791	148,734	42,480	17,749	192,777	16,186	14
150,471	12,848	629	68	11,517	62,881	7,641	16,907	35,247	96,838	31,761	12,194	128,393	12,400	
47,352	2,437	11	6	4,119	25,435	2,308	4,645	11,042	28,031	13,504	3,165	42,568	2,132	10
9,702	2,044	307	9	2,506	12,208	1,181	2,265	3,765	9,011	4,609	914	11,458	3,076	13
93,417	8,367	311	53	4,892	25,238	4,152	9,997	20,440	59,796	13,648	8,115	74,367	7,192	14
48,650	3,783	153	41	4,126	18,529	3,479	7,820	14,932	² 38,617	³ 12,814	3,477	² 50,855	4,029	
960,543	74,928	4,538	673	105,152	402,533	93,897	152,445	342,053	631,703	430,314	52,958	1,055,865	59,110	
323,915	16,574	1,436	245	37,462	135,929	33,026	48,266	113,932	196,835	212,820	9,270	408,431	10,494	11
457,040	32,733	1,607	283	51,219	204,608	46,295	74,440	175,686	300,452	147,562	28,901	454,632	22,283	12
66,947	13,321	1,105	47	7,783	27,685	6,967	13,870	24,140	⁴ 64,769	⁴ 41,559	6,732	⁴ 95,062	17,998	13
112,641	12,300	390	98	8,688	34,311	7,609	15,869	28,295	69,647	28,373	8,055	97,740	8,335	10 14
1,322,653	123,896	4,636	691	81,411	349,426	69,142	131,846	280,043	813,435	390,693	99,520	1,145,200	158,448	
127,602	19,030	83	52	12,506	58,649	10,072	19,901	44,103	85,933	46,778	15,792	111,764	36,739	10
412,812	26,347	833	243	30,902	134,350	27,726	46,777	115,035	259,486	120,610	26,308	380,383	26,021	12
444,442	46,439	2,019	166	17,992	71,370	14,105	26,398	50,932	⁴ 261,969	⁴ 159,484	32,696	⁴ 384,841	69,308	13
337,797	32,080	1,701	230	20,011	85,057	17,239	38,770	69,973	206,047	63,821	24,724	268,212	26,380	14
285,467	28,896	1,654	194	21,654	91,076	17,508	33,242	67,573	166,825	66,875	19,722	228,846	24,576	
165,363	12,062	534	108	11,199	48,007	10,079	18,021	41,407	90,727	39,216	8,746	131,136	7,553	12
33,035	9,024	659	19	4,203	15,644	2,433	4,024	6,316	⁴ 17,459	⁴ 11,734	3,541	⁴ 23,841	8,893	13
87,069	7,810	461	67	6,252	27,425	4,996	11,197	19,850	58,639	15,925	7,435	73,869	8,130	10 14
135,675	11,961	776	101	9,184	38,153	7,782	14,304	29,866	85,201	47,655	12,772	129,720	15,908	
61,084	1,704	101	41	4,747	21,621	4,156	6,768	17,670	39,598	29,641	6,898	69,327	6,810	12
36,159	4,921	329	14	1,724	6,284	1,268	2,118	3,729	23,315	10,624	2,399	30,687	5,651	13
38,432	5,336	346	46	2,713	10,248	2,358	5,418	8,467	22,288	7,390	3,475	29,706	3,447	14

Code	Industry group and industry	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepa- ration, purchased fuel and electricity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll	Number	Man-hours	Wages			
					(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	East North Central—Continued										
	Illinois, total.....	1,320	254	27,224	142,175	22,952	43,160	112,911	453,142	207,887	30,787
10	Metal mining.....	6	4	199	1,069	154	386	827	2,112	1,848	42
12	Bituminous coal mining.....	140	70	11,090	66,380	9,824	17,989	56,614	138,812	48,033	12,101
13	Crude petroleum and natural gas extraction.....	797	104	9,211	39,493	7,598	13,609	30,828	228,906	128,392	13,529
14	Nonmetallic minerals (except fuels) mining.....	377	76	6,824	35,233	5,376	11,176	24,642	83,312	29,614	5,115
	Michigan, total.....	533	86	14,166	72,114	11,788	22,018	58,954	159,922	75,892	8,204
13	Crude petroleum and natural gas extraction.....	191	20	1,737	8,714	1,432	3,217	6,894	23,590	11,935	1,390
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	342	66	12,429	63,400	10,356	18,801	52,060	136,332	63,957	6,814
14	Wisconsin ²	297	37	3,673	17,270	3,204	6,316	14,606	31,529	14,680	2,507
	West North Central, total.....	3,222	463	50,786	251,554	39,015	77,543	175,553	917,767	424,331	68,382
10	Metal mining.....	198	75	20,437	111,725	14,550	28,266	72,661	330,248	125,768	9,580
12	Bituminous coal and lignite mining..	178	24	2,273	11,441	1,536	2,852	7,119	20,799	5,891	4,641
13	Crude petroleum and natural gas extraction.....	1,674	193	17,029	80,749	13,129	26,253	56,626	449,092	245,676	41,045
14	Nonmetallic minerals (except fuels) mining.....	1,172	171	11,047	47,639	9,800	20,172	39,147	117,628	46,996	13,116
	Minnesota, total.....	289	92	17,020	95,982	12,038	23,108	59,827	310,563	116,589	8,294
10	Metal mining.....	89	62	15,147	87,172	10,135	19,721	52,582	291,196	107,780	7,100
14	Nonmetallic minerals (except fuels) mining.....	200	30	1,873	8,810	1,903	3,387	7,245	19,367	8,809	1,194
	Iowa ³	300	43	2,901	12,019	2,535	5,600	10,309	32,931	14,370	4,617
	Missouri, total.....	433	74	8,423	37,709	6,336	12,122	26,021	66,159	24,966	8,451
10	Metal mining.....	50	9	3,245	14,198	2,666	4,895	11,274	21,031	9,615	1,566
12	Bituminous coal mining.....	50	10	1,197	6,730	576	1,105	3,171	9,615	2,702	2,806
13	Crude petroleum and natural gas extraction and Nonmetallic minerals (except fuels) mining.....	333	55	3,981	16,781	3,094	6,122	11,576	35,513	12,649	4,079
14	North Dakota, total.....	169	25	1,950	10,680	1,553	3,490	8,025	40,309	41,702	9,694
13	Crude petroleum and natural gas extraction.....	92	18	1,440	8,383	1,102	2,597	6,048	34,052	39,946	8,171
10	Metal mining, Lignite mining, and Nonmetallic minerals (except fuels) mining.....	77	7	510	2,297	451	893	1,977	6,257	1,756	1,523
14	South Dakota.....	131	14	2,569	12,623	2,215	4,627	10,663	25,114	10,689	1,540
	Nebraska, total.....	303	27	2,148	9,621	1,727	3,475	7,190	63,728	25,999	5,254
13	Crude petroleum and natural gas extraction.....	157	15	1,184	5,621	865	1,633	3,722	54,455	21,900	4,419
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	146	12	964	4,000	862	1,842	3,468	9,273	4,099	835
14	Kansas, total.....	1,597	188	15,775	72,920	12,611	25,121	53,518	378,963	190,016	30,532
12	Bituminous coal mining.....	19	3	252	1,507	204	315	1,088	2,630	731	215
13	Crude petroleum and natural gas extraction.....	1,395	160	13,958	64,106	11,126	21,940	46,694	360,130	183,302	28,428
14	Metal mining and Nonmetallic minerals (except fuels) mining.....	183	25	1,565	7,307	1,281	2,866	5,736	16,203	5,983	1,889
	South Atlantic, total.....	4,712	894	106,684	480,807	93,871	162,285	401,628	936,275	522,869	83,597
10	Metal mining.....	58	13	1,756	6,794	1,384	2,566	4,803	14,687	7,103	989
12	Bituminous coal mining.....	2,717	547	76,965	368,034	68,714	110,039	312,906	635,554	334,448	47,662
13	Crude petroleum and natural gas extraction.....	1,034	45	5,453	20,403	4,548	8,659	16,132	55,465	46,850	8,460
14	Nonmetallic minerals (except fuels) mining.....	903	289	22,510	85,576	19,225	41,021	67,787	230,569	134,468	26,446
	Delaware, Maryland, and District of Columbia, total.....	178	30	2,488	10,494	2,065	4,169	7,704	23,871	14,098	3,409
12	Bituminous coal mining.....	80	5	559	1,981	522	905	1,860	2,994	2,223	744
14	Nonmetallic minerals (except fuels) mining.....	89	25	1,799	7,856	1,514	3,204	5,735	19,768	10,634	2,515
10	Metal mining and Crude petroleum and natural gas extraction.....	9	...	130	657	29	60	109	1,109	1,241	150
13											

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

7

BY GEOGRAPHIC DIVISION AND STATE: 1958 AND 1954—Continued

1958—Continued		1954												
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work ¹	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	Code
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages						
(\$1,000)	(\$1,000)				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	
638,810	53,006	1,345	264	30,157	126,847	26,627	48,697	107,174	375,191	192,172	38,327	542,065	63,625	10
3,705	297	13	3	111	503	89	181	356	1,266	1,868	4	3,111	27	12
186,365	12,581	198	94	14,956	64,722	13,491	21,988	55,958	129,161	51,753	10,664	179,920	11,658	
341,736	29,091	769	112	9,961	39,945	8,567	16,512	32,892	⁴ 190,222	⁴ 120,504	22,747	⁴ 286,780	46,693	13
107,004	11,037	365	55	5,129	21,677	4,480	10,016	17,968	54,542	18,047	4,912	72,254	5,247	14
218,341	25,677	567	94	16,431	76,316	13,729	28,238	61,134	149,074	69,143	23,513	194,968	46,762	
33,512	3,403	262	21	2,104	9,497	1,837	3,744	7,995	⁴ 30,973	⁴ 16,622	4,009	⁴ 43,533	8,071	13
184,829	22,274	305	73	14,327	66,819	11,892	24,494	53,139	118,101	52,521	19,504	151,435	38,691	¹⁰ ¹⁴
44,360	4,356	294	38	3,985	17,034	3,496	7,365	14,296	37,144	14,848	5,186	49,601	7,577	
1,266,035	144,445	3,320	470	51,567	213,366	43,170	86,965	167,642	² 785,763	³ 368,767	104,617	² 1,059,991	199,102	
447,334	18,262	196	81	21,358	94,348	17,512	33,722	71,223	² 320,488	³ 100,896	26,156	² 383,413	64,073	10
26,002	5,329	227	30	2,404	9,369	2,173	3,753	7,863	21,165	8,613	1,719	30,306	1,191	12
634,212	101,601	1,590	212	17,033	70,441	14,168	28,292	55,346	⁴ 357,806	⁴ 222,941	62,899	⁴ 524,679	118,967	13
158,487	19,253	1,307	147	10,772	39,208	9,317	21,198	33,210	86,304	36,317	13,843	121,593	14,871	14
420,253	15,193	292	84	16,995	75,472	13,849	26,355	56,495	290,205	92,083	25,622	343,864	64,046	
393,336	12,740	96	66	15,489	69,616	12,605	23,604	51,715	278,618	87,729	23,697	327,982	62,062	10
26,917	2,453	196	18	1,506	5,856	1,244	2,751	4,780	11,587	4,354	1,925	15,882	1,984	14
45,467	6,451	329	26	2,644	9,104	2,347	5,288	7,894	21,513	10,125	3,731	31,564	3,805	
86,584	12,992	456	74	7,965	31,060	6,697	13,461	24,371	² 56,554	² 21,316	6,064	² 78,171	5,785	
27,615	4,597	24	7	3,668	15,452	2,963	5,745	11,542	² 4,094	³ 9,938	1,691	² 32,851	894	10
11,861	3,262	72	14	856	3,369	787	1,370	2,884	7,650	4,073	724	12,166	281	¹² ¹³ ¹⁴
47,108	5,133	360	53	3,441	12,239	2,947	6,346	9,945	24,810	9,305	3,649	33,154	4,610	
65,771	25,934	146	26	1,798	8,619	1,399	2,956	6,319	² 7,151	³ 31,147	14,008	² 29,994	22,312	
57,991	24,178	61	16	1,164	6,015	823	1,900	4,087	(⁹)	⁴ 29,113	13,480	⁴ 20,646	21,872	¹³ ¹⁰ ¹² ¹⁴
7,780	1,756	85	10	634	2,604	576	1,056	2,232	² 7,226	³ 2,034	528	² 9,348	440	
34,884	2,459	187	23	2,870	11,749	2,497	5,651	9,936	² 22,419	³ 10,406	2,101	² 31,314	3,536	
80,717	14,264	249	21	1,636	6,633	1,433	3,253	5,735	29,222	17,187	8,395	38,417	16,387	
68,306	12,468	91	8	643	2,912	544	1,062	2,407	⁴ 22,077	⁴ 13,895	6,732	⁴ 27,870	14,834	13
12,411	1,796	158	13	993	3,721	889	2,191	3,328	7,145	3,292	1,663	10,547	1,553	¹⁰ ¹⁴
532,359	67,152	1,661	216	17,659	70,729	14,948	30,001	56,892	358,699	186,503	44,696	506,667	83,231	
3,345	231	34	5	497	2,305	423	721	1,770	4,271	2,466	256	6,679	314	12
507,141	64,719	1,393	184	15,014	60,362	12,706	25,120	48,440	⁴ 337,058	⁴ 176,683	42,262	⁴ 475,061	80,942	13
21,873	2,202	234	27	2,148	8,062	1,819	4,160	6,682	17,370	7,354	2,178	24,927	1,975	¹⁰ ¹⁴
1,419,492	123,209	4,227	808	108,999	421,261	98,602	176,135	366,985	² 761,393	³ 406,322	75,363	² 1,144,307	98,768	
18,692	4,087	58	15	2,085	7,205	1,740	3,662	5,649	² 20,063	³ 4,763	3,564	² 21,051	7,336	10
950,892	66,772	2,029	496	79,541	324,530	72,964	120,761	288,514	497,313	249,917	43,635	743,140	47,725	12
89,678	21,097	972	50	5,939	19,072	5,202	9,388	15,721	⁴ 62,305	⁴ 50,923	5,558	⁴ 102,003	16,783	13
360,230	31,253	1,168	247	21,434	70,454	18,696	42,324	57,101	181,712	100,719	22,606	278,113	26,924	14
37,315	4,063	196	30	2,031	7,130	1,804	4,098	6,135	17,941	5,918	2,195	24,142	1,912	
5,476	485	79	3	371	1,073	352	562	1,003	1,631	462	171	2,119	145	12
29,572	3,345	106	26	1,600	5,897	1,401	3,447	4,982	15,759	5,221	1,856	21,464	1,372	14
2,267	233	11	1	60	160	51	89	150	551	235	168	559	395	¹⁰ ¹³

Code	Geographic division or State and major industry group	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepa- ration, purchased fuel and electricity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)			
	South Atlantic--Continued										
	Virginia, total.....	1,029	195	18,243	70,133	15,987	27,283	58,951	125,093	83,216	10,788
10	Metal mining.....	18	4	595	2,110	467	834	1,524	3,583	1,652	348
12	Bituminous coal mining.....	873	130	14,189	55,876	12,415	19,858	47,544	91,990	69,431	6,221
13	Crude petroleum and natural gas extraction.....	6	...	37	158	35	97	146	534	902	54
14	Nonmetallic minerals (except fuels) mining.....	132	61	3,422	11,989	3,070	6,494	9,737	28,986	11,231	4,165
	West Virginia, total.....	2,828	473	68,689	334,589	61,271	99,779	283,346	610,102	310,560	50,067
12	Bituminous coal mining.....	1,759	412	62,201	310,142	55,761	89,256	263,467	540,524	262,787	40,694
13	Crude petroleum and natural gas extraction.....	1,008	43	5,165	18,793	4,421	8,357	15,454	54,058	43,685	8,369
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	61	18	1,323	5,654	1,089	2,166	4,425	15,520	4,088	1,004
14											
	North Carolina ⁵	230	50	3,663	12,095	3,307	6,923	10,100	26,971	12,788	3,045
	South Carolina ⁵	65	21	1,510	5,263	1,249	2,642	3,981	13,273	5,938	1,490
	Georgia, total.....	172	58	5,435	19,462	4,506	9,696	15,602	52,370	23,487	6,922
10	Metal mining and Crude petroleum and natural gas extraction.....	23	...	92	266	78	108	222	851	802	197
12	Bituminous coal mining.....	5	...	16	35	16	20	35	46	7	3
14	Nonmetallic minerals (except fuels) mining.....	144	58	5,327	19,161	4,412	9,568	15,345	51,473	22,678	6,722
	Florida, total.....	210	67	6,656	28,771	5,486	11,793	21,944	84,595	72,782	7,836
10	Metal mining and Crude petroleum and natural gas extraction.....	19	7	717	3,288	487	895	1,962	7,821	4,303	121
14	Nonmetallic minerals (except fuels) mining.....	191	60	5,939	25,483	4,999	10,898	19,982	76,774	68,479	7,715
	East South Central, total.....	3,226	576	62,360	264,698	54,411	94,227	221,126	651,075	378,648	54,941
10	Metal mining.....	53	23	5,314	23,143	4,431	7,718	19,103	61,348	45,490	3,316
12	Bituminous coal mining.....	1,749	301	38,735	167,773	34,534	54,597	144,194	303,623	176,212	24,851
13	Crude petroleum and natural gas extraction.....	915	107	9,767	42,884	7,989	16,049	32,646	207,302	122,193	18,053
14	Nonmetallic minerals (except fuels) mining.....	509	145	8,544	30,898	7,457	15,863	25,183	78,802	34,753	8,721
	Kentucky, total.....	2,116	337	36,158	149,588	32,152	53,992	129,130	319,124	190,383	28,098
12	Bituminous coal mining.....	1,316	233	28,504	122,274	25,424	40,619	106,490	226,754	137,150	18,892
13	Crude petroleum and natural gas extraction.....	634	51	4,930	17,236	4,359	8,072	14,403	68,800	43,195	5,890
14	Nonmetallic minerals (except fuels) mining ¹⁰	166	53	2,724	10,078	2,369	5,301	8,237	23,570	10,038	3,316
	Tennessee, total.....	533	93	8,948	33,497	7,651	13,798	27,478	69,645	42,136	5,596
10	Metal mining.....	20	9	2,634	10,461	2,113	3,737	8,215	18,306	11,123	437
12	Bituminous coal mining.....	281	28	2,747	9,893	2,453	3,653	8,705	17,355	13,081	1,638
13	Crude petroleum and natural gas extraction.....	31	...	42	189	17	23	38	32	167	12
14	Nonmetallic minerals (except fuels) mining.....	201	56	3,525	12,954	3,068	6,385	10,520	33,952	17,765	3,509
	Alabama, total.....	321	83	12,075	55,061	10,572	17,526	45,560	127,083	72,068	10,325
10	Metal mining.....	33	14	2,680	12,682	2,318	3,981	10,888	43,042	34,367	2,879
12	Bituminous coal mining.....	152	40	7,484	35,606	6,657	10,325	28,999	59,514	25,981	4,321
13	Crude petroleum and natural gas extraction.....	51	6	343	1,758	306	663	1,545	11,857	7,976	1,853
14	Nonmetallic minerals (except fuels) mining.....	85	23	1,568	5,015	1,291	2,557	4,128	12,670	3,744	1,272
	Mississippi, total.....	256	63	5,179	26,552	4,036	8,911	18,958	135,223	74,061	10,922
13	Crude petroleum and natural gas extraction.....	199	50	4,452	23,701	3,307	7,291	16,660	126,613	70,855	10,298
14	Nonmetallic minerals (except fuels) mining.....	57	13	727	2,851	729	1,620	2,298	8,610	3,206	624

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

9

BY GEOGRAPHIC DIVISION AND STATE: 1958 AND 1954--Continued

1958--Continued				1954											
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work ¹	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	Code	
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
(\$1,000)	(\$1,000)				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		
202,135	16,962	755	153	16,119	52,823	14,400	25,045	45,027	89,095	51,316	7,429	137,543	10,297	10	
4,456	1,127	19	8	954	2,720	843	1,564	2,238	5,006	1,688	1,099	5,764	2,029	12	
157,915	9,727	607	96	11,720	39,496	10,730	17,324	34,763	61,508	38,777	3,524	99,078	4,731	12	
916	574	13	2	130	470	116	236	374	502	1,096	69	1,106	561	13	
38,848	5,534	116	47	3,315	10,137	2,711	5,921	7,652	22,079	9,755	2,737	31,595	2,976	14	
893,634	77,095	2,322	462	74,715	307,465	68,340	114,929	272,734	513,492	261,277	46,161	761,926	59,004		
787,448	56,557	1,338	397	67,441	283,942	61,873	102,860	252,729	434,141	210,668	39,940	641,900	42,849	12	
86,520	19,592	914	41	5,442	16,811	4,909	8,769	14,614	462,760	445,794	4,286	498,356	14,484	13	
19,666	946	70	24	1,832	6,712	1,558	3,300	5,391	16,591	4,815	1,935	21,670	1,671	14	
38,924	3,880	513	44	3,562	10,371	3,322	7,420	9,192	230,678	39,290	3,021	239,566	3,421		
18,854	1,847	56	18	1,422	4,095	1,276	2,909	3,330	10,097	3,403	1,298	12,852	1,946		
75,033	7,746	192	47	4,354	13,297	3,928	8,783	10,957	32,724	13,077	4,192	43,439	6,554		
1,609	241	30	3	167	471	147	308	383	835	1,133	220	1,841	347	10	
53	3	5	...	9	19	9	15	19	33	10	...	43	...	12	
73,371	7,502	157	44	4,178	12,807	3,772	8,460	10,555	31,856	11,934	3,972	41,555	6,207	14	
153,597	11,616	193	54	6,796	26,080	5,532	12,951	19,610	267,366	362,041	11,067	2124,839	15,634		
9,104	3,141	32	9	740	3,387	363	872	1,485	23,718	34,861	2,250	25,822	5,006	13	
144,493	8,475	161	45	6,056	22,693	5,169	12,079	18,125	63,648	57,180	8,817	119,017	10,628	14	
985,672	98,992	3,073	581	66,628	240,006	60,615	104,304	206,919	2521,131	3224,043	44,401	2720,566	69,011	10	
105,099	5,055	58	22	14,800	119,490	14,193	17,671	115,400	30,922	32,128	3,424	52,454	5,022		
479,608	25,078	1,779	326	44,713	163,620	41,289	66,122	144,498	269,763	99,219	16,415	367,828	17,569	12	
290,385	57,163	727	90	7,687	27,678	6,666	12,453	22,323	4149,569	475,693	17,133	4202,664	39,731	13	
110,580	11,696	509	143	109,428	1029,218	108,467	1018,058	1024,698	70,877	26,003	7,429	97,620	6,689	14	
492,871	44,734	1,816	337	38,895	139,313	35,820	59,659	124,149	272,103	114,037	18,756	374,177	30,719		
363,933	18,863	1,150	242	31,854	117,747	29,479	47,441	105,702	194,233	76,268	9,953	268,870	11,584	12	
96,131	21,754	503	52	4,395	13,097	4,048	7,227	11,670	459,735	431,487	6,604	480,796	17,030	13	
32,807	4,117	163	43	2,646	8,469	2,293	4,991	6,777	18,135	6,282	2,199	24,511	2,105	14	
108,979	8,398	665	105	9,576	30,196	8,839	16,291	26,368	61,108	23,256	5,511	82,815	7,060		
28,122	1,744	21	9	918	3,090	784	1,385	2,389	3,630	3,926	1,044	5,874	2,726	10	
29,884	2,190	412	31	4,142	13,160	3,969	6,339	12,232	20,892	5,717	1,159	26,551	1,217	12	
204	7	24	...	24	50	23	37	45	15	107	3	120	5	13	
50,769	4,457	208	65	4,492	13,896	4,063	8,530	11,702	36,571	13,506	3,305	50,270	3,112	14	
195,914	13,562	378	88	14,364	54,940	12,880	22,038	44,782	293,638	342,822	8,862	2137,141	8,183		
76,977	3,311	36	13	3,882	16,400	3,409	6,286	13,011	227,292	319,202	2,380	246,580	2,296	10	
85,791	4,025	217	53	8,717	32,713	7,841	12,342	26,564	54,638	17,234	5,303	72,407	4,768	12	
17,612	4,074	35	2	243	1,149	213	462	978	2,289	2,945	126	4,850	510	13	
15,534	2,152	90	20	1,522	4,678	1,417	2,948	4,229	9,419	3,441	1,053	13,304	609	14	
187,908	32,298	214	51	3,793	15,557	3,076	6,316	11,620	94,282	43,928	11,272	126,433	23,049		
176,438	31,328	165	36	3,025	13,382	2,382	4,727	9,630	487,530	441,154	10,400	4116,898	22,186	13	
11,470	970	49	15	768	2,175	694	1,589	1,990	6,752	2,774	872	9,535	863	14	

GENERAL STATISTICS FOR ALL MINERAL INDUSTRIES AND MAJOR INDUSTRY GROUPS,

Code	Geographic division or State and major industry groups	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepa- ration, purchased fuel and electricity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)			
									(\$1,000)	(\$1,000)	(\$1,000)
	West South Central, total.....	10,047	1,891	228,625	1,250,319	151,524	320,754	719,873	6,183,094	2,831,832	420,437
10	Metal mining.....	81	16	1,469	7,022	1,016	2,028	4,595	23,885	5,993	1,722
12	Bituminous coal and lignite mining..	67	16	1,241	6,701	1,130	2,119	6,013	15,541	4,758	743
13	Crude petroleum and natural gas extraction.....	9,329	1,700	213,098	1,179,083	138,789	293,051	665,628	5,957,313	2,759,945	400,540
14	Nonmetallic minerals (except fuels) mining.....	570	159	12,817	57,513	10,589	23,556	43,637	186,355	61,136	17,432
	Arkansas, total.....	442	62	5,248	23,295	4,072	8,001	16,547	110,457	34,462	7,868
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	120	26	2,189	8,614	1,805	3,586	6,647	28,137	6,601	2,835
12	Bituminous coal mining.....	29	4	252	1,219	234	394	1,124	2,077	1,119	90
13	Crude petroleum and natural gas extraction.....	293	32	2,807	13,462	2,033	4,021	8,776	80,243	26,742	4,943
	Louisiana, total.....	1,120	341	46,145	265,169	33,252	75,334	174,683	1,529,317	806,234	142,791
13	Crude petroleum and natural gas extraction.....	1,025	304	42,407	246,569	30,524	69,386	162,616	1,459,745	784,098	133,559
14	Nonmetallic minerals (except fuels) mining.....	95	37	3,738	18,600	2,728	5,948	12,067	69,572	22,136	9,232
	Oklahoma, total.....	2,630	340	40,341	208,704	24,439	47,597	104,053	671,419	311,548	43,791
10	Metal mining and Bituminous coal mining.....	61	11	1,084	5,446	885	1,721	4,525	10,384	5,368	447
12	Crude petroleum and natural gas extraction.....	2,472	312	38,081	198,664	22,519	43,542	95,420	651,830	300,802	41,805
14	Nonmetallic minerals (except fuels) mining.....	97	17	1,176	4,594	1,035	2,334	4,108	9,205	5,378	1,539
	Texas, total.....	5,855	1,148	136,891	753,181	89,761	189,822	424,590	3,871,901	1,679,588	225,987
13	Crude petroleum and natural gas extraction.....	5,539	1,052	129,803	720,418	83,713	176,102	398,816	3,765,495	1,648,303	220,233
10	Metal mining, lignite mining and Nonmetallic minerals (except fuels) mining.....	316	96	7,088	32,763	6,048	13,720	25,774	106,406	31,285	5,754
	Mountain, total.....	3,948	562	85,231	464,624	64,503	129,501	328,283	1,742,413	1,036,107	139,053
10	Metal mining.....	1,357	173	44,187	235,773	35,647	71,752	181,784	569,896	503,164	40,429
12	Bituminous coal and lignite mining..	222	48	5,730	28,710	4,999	7,889	24,168	48,617	32,075	5,377
13	Crude petroleum and natural gas extraction.....	1,790	275	25,495	147,716	15,914	34,056	82,453	973,935	454,956	80,401
14	Nonmetallic minerals (except fuels) mining.....	579	66	9,819	52,425	7,943	15,804	39,878	149,965	45,912	12,846
	Montana, total.....	439	39	8,176	42,944	5,825	11,060	27,843	117,674	80,490	5,183
12	Bituminous coal and lignite mining..	34	2	177	804	157	260	705	1,060	449	226
13	Crude petroleum and natural gas extraction.....	231	20	2,263	13,572	1,268	2,609	6,689	70,411	29,656	4,525
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	172	17	5,736	28,568	4,400	8,191	20,449	46,203	50,385	432
14	Idaho, total.....	168	22	3,942	21,168	3,263	6,940	15,543	35,803	16,717	1,121
10	Metal mining.....	108	16	3,325	18,032	2,796	6,105	13,496	29,270	12,983	767
12	Bituminous coal mining, Crude petroleum and natural gas extraction and Nonmetallic minerals (except fuels) mining.....	60	6	617	3,136	467	835	2,047	6,533	3,734	354
14	Wyoming, total.....	485	85	8,866	50,868	5,927	11,870	30,544	346,951	106,123	18,471
10	Metal mining.....	78	3	917	4,996	761	1,558	4,081	25,129	20,707	529
12	Bituminous coal mining.....	23	7	538	2,157	425	524	1,630	4,660	1,658	269
13	Crude petroleum and natural gas extraction.....	342	62	6,383	38,564	3,943	8,159	20,986	298,652	77,635	16,125
14	Nonmetallic minerals (except fuels) mining.....	42	13	1,028	5,151	798	1,629	3,847	18,510	6,123	1,548

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

11

BY GEOGRAPHIC DIVISIONS AND STATES: 1958 AND 1954—Continued

1958—Continued						1954									
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work ¹	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	Code	
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
(\$1,000)	(\$1,000)				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		
7,901,720	1,533,643	9,179	1,906	223,679	1,044,616	165,208	358,039	688,469	² 5,209,798	³ 2,418,750	615,825	² 6,718,777	1,525,548	10 12	
29,737	1,863	131	32	102,653	¹ 11,077	¹ 02,235	104,900	108,567	² 25,525	³ 15,006	1,103	² 40,374	1,212		
20,100	942	81	19	1,767	6,910	1,666	2,873	6,435	² 15,279	³ 4,251	928	² 19,647	811		
7,615,740	1,502,058	8,466	1,728	206,638	978,255	150,359	325,181	633,631	⁴ 4,968,267	⁴ 2,347,229	599,126	⁴ 6,408,327	1,506,295	13	
236,143	28,780	501	127	¹¹ 12,621	¹¹ 49,374	¹¹ 10,948	¹¹ 25,085	¹¹ 39,836	200,727	52,264	14,668	250,429	17,230	14	
136,521	16,266	410	67	5,910	22,483	4,985	9,986	17,501	² 107,904	³ 37,791	7,139	² 139,141	13,690	10 14 12	
34,808	2,765	106	25	3,171	11,523	2,812	5,782	9,719	² 37,819	³ 11,991	2,637	² 50,111	2,333		
3,086	200	36	7												
98,627	13,301	268	35	2,739	10,960	2,173	4,204	7,782	⁴ 70,085	⁴ 25,800	4,502	⁴ 89,030	11,357	13	
1,908,364	569,978	895	284	37,108	179,251	29,474	65,780	132,617	984,473	532,093	150,157	1,235,547	431,176		
1,826,164	551,238	823	253	33,412	164,657	26,538	59,222	121,877	⁴ 922,777	⁴ 515,965	148,061	⁴ 1,160,396	426,407	13	
82,200	18,740	72	31	3,696	14,594	2,936	6,558	10,740	61,696	16,128	2,096	75,151	4,769	14	
840,749	186,009	2,610	393	40,859	176,929	30,294	61,057	115,138	² 584,366	³ 320,307	94,707	² 778,906	220,465	10 12	
15,398	801	120	26	2,209	8,560	2,125	4,365	8,171	² 14,610	³ 12,907	576	² 27,652	432		
810,578	183,859	2,389	355	37,505	164,339	27,163	54,259	103,592	⁴ 560,325	⁴ 304,759	92,631	⁴ 739,151	218,564		13
14,773	1,349	101	12	1,145	4,030	1,006	2,433	3,375	9,431	2,641	1,500	12,103	1,469	14	
5,016,086	761,390	5,264	1,162	139,802	665,953	100,455	221,216	423,213	3,533,055	1,528,559	363,822	4,565,183	860,217		
4,880,371	753,660	4,986	1,085	132,982	638,299	94,485	207,496	400,380	⁴ 3,415,080	⁴ 1,500,705	353,932	⁴ 4,419,750	849,967	13 10 12 14	
135,715	7,730	278	77	6,820	27,654	5,970	13,720	22,833	118,011	27,854	9,890	145,433	10,250		
2,439,810	477,763	4,551	556	84,662	393,746	68,713	140,458	301,851	² 1,305,463	³ 746,421	128,584	² 1,805,251	364,677		
961,762	151,727	2,133	155	45,403	214,417	37,588	80,694	170,458	² 504,531	³ 334,764	28,345	² 764,811	92,289	10	
77,988	8,081	281	61	7,576	28,098	6,872	10,037	24,183	51,524	15,596	3,692	67,645	3,167	12	
1,207,668	301,624	1,418	266	22,516	107,509	16,557	34,095	72,629	⁴ 629,776	⁴ 357,762	84,000	⁴ 817,133	254,405	13	
192,392	16,331	719	74	9,167	43,722	7,696	15,632	34,581	119,632	38,299	12,547	155,662	14,816	14	
180,014	23,333	578	55	11,568	51,624	8,899	17,406	36,839	² 82,867	³ 86,110	10,554	² 147,847	31,680		
1,509	226	39	4	415	1,482	355	521	1,202	3,822	1,431	851	5,250	854	12	
87,251	17,341	292	29	2,741	13,123	1,887	4,154	8,392	⁴ 32,846	⁴ 31,448	6,313	⁴ 46,035	24,572	13 10 14	
91,254	5,766	247	22	8,412	37,019	6,657	12,731	27,245	² 46,199	³ 53,231	3,390	² 96,562	6,254		
51,016	2,625	249	28	4,767	22,358	4,121	8,622	18,664	² 38,558	³ 15,936	3,254	² 51,883	5,820		
40,696	2,324	169	21	4,190	19,831	3,607	7,556	16,460	² 32,491	³ 12,905	1,315	² 42,936	3,730	10	
10,320	301	80	7	577	2,527	514	1,066	2,204	6,067	3,031	1,939	8,947	2,090	12 13 14	
405,762	65,783	483	101	9,714	45,724	7,460	14,579	32,385	² 258,165	³ 105,534	25,319	² 317,559	71,475		
36,725	9,640	55	13	1,519	5,607	1,401	2,125	5,037	² 12,234	³ 3,576	191	² 15,699	318	10 12	
6,207	380														
338,614	53,798	370	77	7,168	35,628	5,212	10,720	23,809	⁴ 226,348	⁴ 96,103	24,359	⁴ 276,442	70,368	13	
24,216	1,965	58	11	1,027	4,489	847	1,734	3,539	19,583	5,855	769	25,418	789	14	

Code	Geographic division or State and major industry group	1958									
		Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for prepa- ration, purchased fuel and electricity, and con- tract work ¹	Cost of purchased machinery installed
		Total	With 20 or more employ- ees	Number	Payroll	Number	Man-hours	Wages			
	Mountain—Continued										
	Colorado, total.....	1,151	128	14,425	76,629	9,795	19,066	47,141	248,986	140,496	30,633
10	Metal mining.....	375	36	5,726	28,487	4,646	9,138	21,863	69,460	80,075	12,158
12	Bituminous coal mining.....	105	21	2,016	9,627	1,799	2,823	8,358	16,304	3,822	881
13	Crude petroleum and natural gas extraction.....	534	62	5,625	33,253	2,448	5,139	12,578	151,487	52,214	17,028
14	Nonmetallic minerals (except fuels) mining.....	137	9	1,058	5,262	902	1,966	4,342	11,735	4,385	566
	New Mexico, total.....	760	145	17,573	97,830	13,579	28,309	70,536	532,482	349,607	47,816
12	Bituminous coal mining.....	22	1	156	588	133	231	515	1,176	292	590
13	Crude petroleum and natural gas extraction.....	555	110	9,104	49,300	6,760	14,542	33,876	381,366	234,832	33,198
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	183	34	8,313	47,942	6,686	13,536	36,145	149,940	114,483	14,028
14	Arizona, total.....	308	40	15,249	79,398	12,104	24,450	61,264	182,514	84,802	6,185
10	Metal mining.....	193	37	14,650	77,490	11,576	23,493	59,689	179,468	80,860	5,797
12	Bituminous coal mining and Crude petroleum and natural gas										
13	extraction.....	26	...	69	279	56	97	191	(⁹)	1,801	64
14	Nonmetallic minerals (except fuels) mining.....	89	3	530	1,629	472	860	1,384	3,993	2,141	324
12	Utah, total.....	438	75	13,859	79,154	11,456	22,621	62,217	244,266	223,984	22,261
13	Bituminous coal.....	35	17	2,825	15,506	2,467	4,029	12,932	25,371	25,846	3,411
14	Crude petroleum and natural gas extraction.....	95	21	1,972	12,209	1,439	3,503	8,105	72,762	58,590	9,455
10	Metal mining and Nonmetallic minerals (except fuels) mining.....	308	37	9,062	51,439	7,550	15,089	41,180	146,133	139,548	9,395
14	Nevada ¹³	199	28	3,141	16,633	2,554	5,185	13,195	33,737	33,888	7,383
	Pacific, total.....	2,034	305	36,543	224,434	25,924	52,422	142,663	1,274,192	391,146	46,118
10	Metal mining.....	345	21	2,597	14,048	2,012	4,178	9,763	46,582	16,169	3,061
12	Bituminous coal mining.....	13	5	276	1,360	245	594	1,202	1,585	975	64
13	Crude petroleum and natural gas extraction.....	933	160	23,282	151,184	15,485	30,307	86,989	1,065,570	315,138	33,375
14	Nonmetallic minerals (except fuels) mining.....	743	119	10,388	57,842	8,182	17,343	44,709	160,455	58,864	9,618
	Washington, total.....	198	28	2,020	10,836	1,575	3,082	7,831	23,568	11,319	1,525
10	Metal mining.....	49	6	572	3,217	1,463	1,941	15,412	159,562	5,096	1,208
12	Bituminous coal mining.....	13	5	276	1,360	245	594	1,202	1,585	975	64
13	Crude petroleum and natural gas extraction.....	9	2	129	1,055	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	776	(¹⁵)
14	Nonmetallic minerals (except fuels) mining.....	127	15	1,043	5,204	867	1,547	4,217	12,421	4,472	1,253
	Oregon, total.....	194	13	1,196	6,053	980	1,986	4,911	15,700	8,939	1,591
10	Metal mining ¹⁴	61	3	265	1,469					3,617	
13	Crude petroleum and natural gas extraction.....	10	...	24	139	226	494	1,167	7,048	443	405
14	Nonmetallic minerals (except fuels) mining.....	123	10	907	4,445	754	1,492	3,744	8,652	4,879	1,186
	California, total.....	1,642	264	33,327	207,545	23,369	47,354	129,921	1,234,924	370,888	43,002
10	Metal mining ¹⁵	235	12	1,760	9,362	1,365	2,829	6,401	29,743	7,456	2,460
13	Crude petroleum and natural gas extraction.....	914	158	23,129	149,990	15,443	30,221	86,772	1,065,799	313,919	33,363
14	Nonmetallic minerals (except fuels) mining.....	493	94	8,438	48,193	6,561	14,304	36,748	139,382	49,513	7,179

¹Includes the cost of products purchased for resale without further processing.

²Excludes figures for the Uranium-Radium-Vanadium Ores Industry, for which value of shipments and cost of minerals received for preparation were not collected in the 1954 Census. It is estimated, on the basis of figures in the forthcoming chapter on Uranium of the 1959 Minerals Yearbook (United States Department of the Interior, Bureau of Mines), that the gross value of shipments of the Uranium-Radium-Vanadium Ores Industry in 1954 for the United States as a whole should have been between \$70 and \$90 million, and that the value added in mining should have been between \$20 and \$40 million.

³Excludes cost of minerals received for preparation by the Uranium-Radium-Vanadium Ores Industry. It is estimated on the basis of the source indicated in footnote 2 that for 1954 the value of minerals received for preparation by this industry for the United States as a whole amounted to between \$30 and \$50 million.

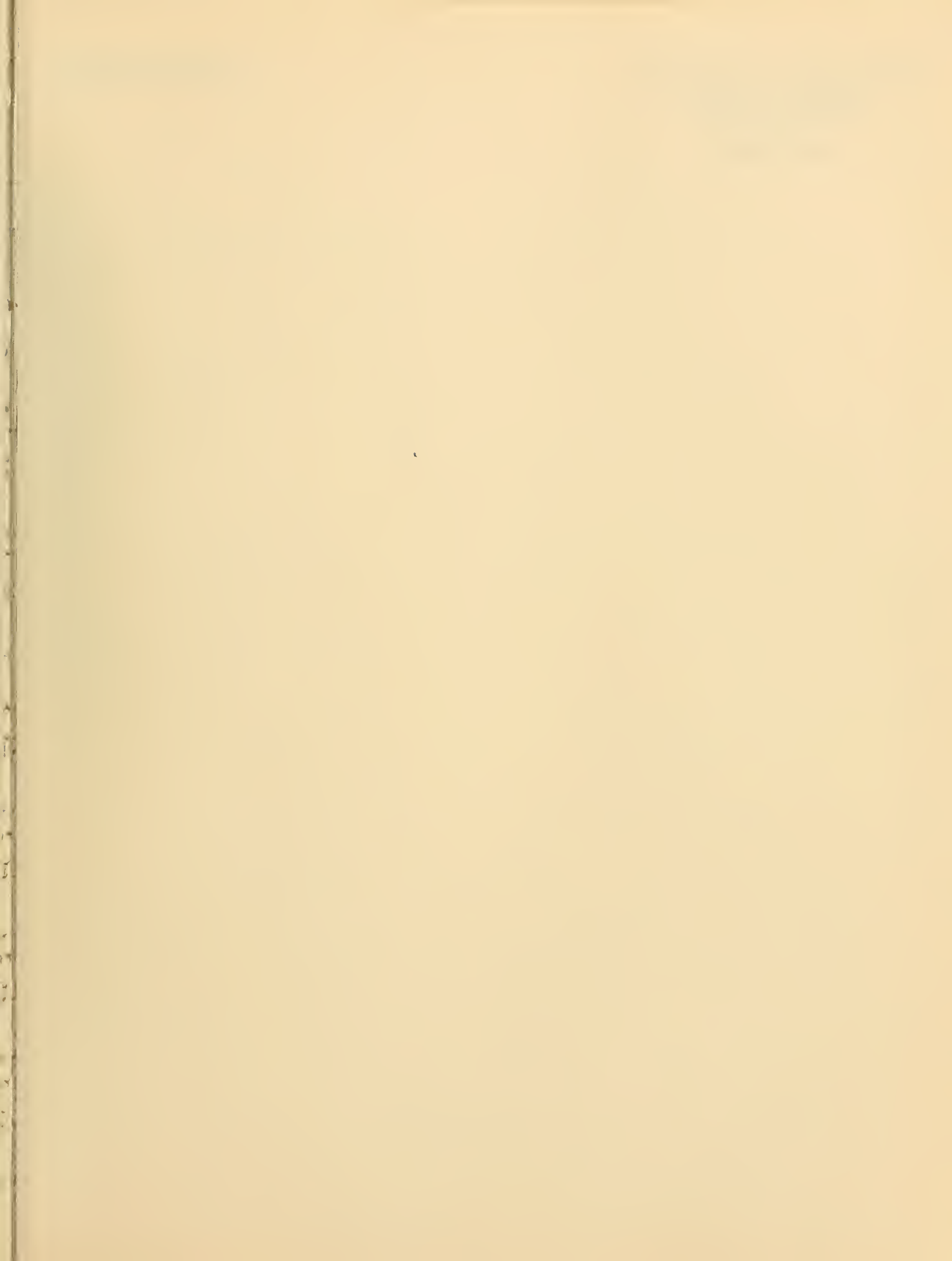
⁴For natural gas liquids plants in 1954, data were collected on the quantity but not on the cost of gas received for processing and on the value of residue gas shipped. Such cost and value figures have been estimated and included, permitting computation of value added.

⁵Represents Metal Mining and Nonmetallic Minerals (Except Fuels) Mining only.

BY GEOGRAPHIC DIVISION AND STATE: 1958 AND 1954—Continued

1958—Continued		1954												
Value of shipments and receipts	Capital expenditures	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, minerals received for preparation, purchased fuel and electricity, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	Code
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages						
(\$1,000)	(\$1,000)				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	
361,469	58,646	1,020	117	13,550	59,544	10,840	21,045	43,934	2204,547	395,854	24,767	2260,695	56,479	10
141,190	20,503	490	31	126,178	128,258	125,239	121,619	1223,217	2,126,599	3,123,643	125,587	2,124,623	1210,212	12
19,698	1,309	127	24	2,618	8,935	2,431	3,229	7,928	13,480	2,609	437	15,983	543	12
184,986	35,743	247	51	4,754	22,351	3,170	6,197	12,789	4125,468	461,602	18,743	4160,089	45,724	13
15,595	1,091	156	11	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	14
705,816	224,089	691	119	13,934	65,784	11,545	23,599	51,274	2338,096	3176,332	41,036	2433,374	121,656	12
783	1,275	24	3	159	378	147	225	350	614	119	25	732	26	12
501,495	147,901	419	93	6,911	31,773	5,655	11,710	24,646	4247,205	4150,769	32,961	4324,924	106,011	13
203,538	74,913	248	23	6,864	33,633	5,743	11,664	26,278	290,277	325,444	8,050	2107,718	15,619	14
243,367	30,134	525	36	13,231	66,584	11,014	25,169	53,889	2178,139	380,021	9,154	2217,936	47,867	10
237,410	28,715	435	28	12,693	64,785	10,529	24,180	52,326	2174,384	378,199	8,673	2213,055	46,690	10
218	700	20	...	538	1,799	485	989	1,563	3,755	1,822	481	4,881	1,177	12
5,739	719	70	8	538	1,799	485	989	1,563	3,755	1,822	481	4,881	1,177	14
426,965	63,546	555	59	12,636	56,620	10,249	19,806	43,260	2151,662	3131,755	10,090	2273,486	19,438	12
49,737	4,891	54	18	3,091	12,721	2,735	4,351	10,533	24,020	8,284	2,309	32,924	1,689	12
94,672	46,135	56	13	755	3,853	490	993	2,411	1,127	12,829	1,205	9,064	6,097	13
282,556	12,520	445	28	8,790	40,046	7,024	14,462	30,316	2126,515	3110,642	6,576	2231,498	11,652	10
65,401	9,607	450	41	5,262	25,508	4,585	10,232	21,606	253,429	354,879	4,410	2102,471	10,262	14
1,540,964	170,492	2,755	360	43,898	223,675	33,218	66,398	155,722	21,350,173	3424,236	72,765	21,618,853	228,371	10
57,797	8,015	799	31	3,811	17,046	3,204	7,306	14,163	239,003	323,592	3,388	257,225	8,808	12
2,535	89	18	5	711	2,820	670	1,006	2,649	3,402	1,202	42	4,602	44	12
1,271,047	143,036	981	198	27,641	148,225	20,278	39,776	98,108	41,170,222	4353,556	54,147	41,378,172	199,753	13
209,585	19,352	957	126	11,735	55,584	9,066	18,310	40,802	137,546	45,886	15,188	178,854	19,766	14
33,753	2,659	287	33	3,096	14,218	2,515	4,651	10,840	222,346	39,503	2,387	231,404	2,857	10
1514,819	643	49	7	787	3,730	647	1,416	2,923	26,085	33,062	407	28,845	714	12
2,535	89	16	5	827	3,533	682	1,032	2,706	3,263	1,400	60	4,636	87	12
(15)	180	7	2	827	3,533	682	1,032	2,706	3,263	1,400	60	4,636	87	13
16,399	1,747	215	19	1,482	6,955	1,186	2,203	5,211	12,998	5,061	1,920	17,923	2,056	14
19,781	6,449	278	13	1,436	6,313	1,280	2,588	5,485	12,646	6,549	2,759	18,263	3,691	10
6,492	4,806	90	1	172	625	151	283	501	736	2,038	491	1,686	1,579	13
13,289	1,428	182	12	1,264	5,688	1,129	2,305	4,984	11,910	4,511	2,268	16,577	2,112	14
1,487,430	161,384	2,190	314	39,366	203,144	29,423	59,159	139,397	21,315,181	3408,184	67,619	21,569,186	221,823	10
37,093	2,566	662	23	2,856	12,714	2,407	5,609	10,742	231,893	318,869	2,490	246,713	6,564	10
1,270,440	142,641	968	196	27,521	147,489	20,265	39,748	98,048	41,170,650	4353,001	54,129	41,378,119	199,661	13
179,897	16,177	560	95	8,989	42,941	6,751	13,802	30,607	112,638	36,314	11,000	144,354	15,598	14

⁶For 1958, represents Nonmetallic Minerals (Except Fuels) Mining only; for 1954, includes Metal Mining.⁷Represents Nonmetallic Minerals (Except Fuels) Mining only.⁸Represents Bituminous Coal Mining and Nonmetallic Minerals (Except Fuels) Mining only.⁹Value added in mining is not shown since the combined cost of supplies, minerals received, purchased fuel and electricity, contract work, and purchased machinery installed exceeds the sum of the value of shipments and receipts and capital expenditures.¹⁰For 1954, includes data for one Metal Mining establishment in Kentucky.¹¹Excludes data for one Metal Mining establishment in Kentucky.¹²Figures for Nonmetallic Minerals (Except Fuels) Mining are included with those for Metal Mining.¹³Represents Metal Mining, Crude Petroleum and Natural Gas Extraction, and Nonmetallic Minerals (Except Fuels) Mining.¹⁴For 1954, includes data for one Bituminous Coal Mining establishment.¹⁵For 1954, includes data for one Lignite Mining establishment.



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1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-10B

IRON ORES INDUSTRY

(S.I.C. CODE 1011)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Iron Ores Industry were valued at \$681.9 million, an increase of 25 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 8 percent from 1954 to 1958 to a total of 31.6 thousand employees in 1958. Value added in mining in the industry amounted to \$499.7 million in 1958, an increase of 15 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this report for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE IRON ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939 AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	244	225	¹ 196	186
With 20 or more employees.....	...do.....	130	135	(NA)	² 159
All employees:					
Number.....	Number.....	31,589	34,170	22,651	31,113
Payroll.....	Thousand dollars...	174,414	156,909	33,326	47,434
Production and development workers:					
Number.....	Number.....	23,634	28,216	20,377	28,623
Man-hours.....	Thousands.....	42,770	53,288	38,513	(NA)
Wages.....	Thousand dollars...	120,630	119,688	27,431	41,049
Value added in mining.....	...do.....	499,718	435,668	133,390	167,127
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	205,835	159,534	17,481	30,208
Minerals received for preparation only.....	...do.....	64,569	12,837	(NA)	(NA)
Contract work only.....	...do.....	28,624	47,515	236	1,552
Cost of purchased machinery installed.....	...do.....	19,396	36,994	(NA)	4,016
Value of shipments and receipts.....	...do.....	681,902	547,218	(NA)	(NA)
Value of net shipments and receipts.....	...do.....	636,871	539,160	³ 150,871	³ 197,335
Capital expenditures.....	...do.....	43,047	84,978	(NA)	(NA)

NA Not available.

¹Represents number of mines.²Represents producing establishments with 21 or more production and development workers.³Represents value of products.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

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The Iron Ores Industry represents establishments primarily engaged in mining, beneficiating, or otherwise preparing iron ores. The mining of ferruginous manganese and manganiferous iron ores valued chiefly for their iron content is classified in the Iron Ores Industry. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Iron Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Iron Ores Industry amounted to \$681.9 million. Of this total over 95 percent represented products primary to the industry.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that the value in 1958 of iron ores, concentrates, and agglomerates, shipped by all producers of such products was \$671.3 million. Of this total, over 98 percent was shipped by establishments classified in the Iron Ores Industry.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one

establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of net shipments and receipts of the Iron Ores Industry in 1958 was \$636.9 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.--GENERAL STATISTICS FOR THE IRON ORES INDUSTRY BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954

Region or division and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	244	130	31,589	174,414	23,634	42,770	120,630	499,718	205,835	19,396	681,902	43,047	34,170	435,668
Middle Atlantic.....	12	10	3,499	19,944	2,959	5,604	16,174	33,180	16,654	2,709	46,850	5,693	3,903	28,512
North Central.....	151	95	22,478	128,021	16,091	29,206	83,180	362,097	141,898	10,801	484,040	30,756	25,027	347,346
Michigan.....	32	27	5,720	30,782	4,784	7,521	24,922	62,619	30,317	2,769	80,613	15,092	7,943	59,050
Minnesota.....	84	61	15,053	86,619	10,058	19,558	52,143	290,292	107,514	7,100	392,209	12,697	15,398	278,064
Wisconsin and Missouri.....	35	7	1,705	10,620	1,249	2,127	6,115	9,186	4,067	932	11,218	2,967	1,686	10,232
South.....	49	16	4,323	19,072	3,609	6,145	16,065	60,632	40,716	3,385	100,792	3,941	4,283	32,918
Alabama.....	30	12	2,547	12,168	2,192	3,718	10,427	41,594	33,845	2,875	75,011	3,303	3,840	27,060
Texas.....	5	3	247	1,366	212	535	1,153	5,726	1,168	134	6,937	91	340	5,138
West.....	32	9	1,289	7,377	975	1,815	5,211	43,809	6,567	2,501	50,220	2,657	957	26,892
Utah.....	7	3	465	2,868	294	565	1,669	22,182	2,955	507	24,789	855	424	13,201
Nevada.....	14	4	160	940	144	295	835	2,588	1,496	166	3,623	627	122	998

¹Includes figures for central administrative office employees in Ohio.

Table 3.--PRIMARY PRODUCTS OF THE IRON ORES INDUSTRY PRODUCED IN ALL INDUSTRIES, BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954

(Includes ferruginous manganese and manganiferous iron ores valued chiefly for their iron content)

Product, region or division, and State	1958						1954					
	Production	Shipments includ- ing interplant transfers		Minerals prepared			Production	Shipments includ- ing interplant transfers		Minerals prepared		
		Quantity	Value	Produced and prepared at same estab- lishment	Received from other establish- ments for preparation			Quantity	Value	Produced and prepared at same estab- lishment	Received from other establish- ments for preparation	
					Quantity	Cost					Quantity	Cost
(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(1,000)	
United States, total:												
Crude ore, total ¹	109,688	50,631	311,277	59,949	19,898	57,340	107,358	50,466	324,029	257,529	32,667	312,837
Direct-shipping ore.....	33,242	34,096	278,766	xxx	xxx	xxx	49,143	48,391	315,971	xxx	xxx	xxx
Beneficiating-grade ore	76,446	16,535	32,511	xxx	xxx	xxx	58,215	2,075	8,058	xxx	xxx	xxx
Concentrates, total.....	34,569	22,535	190,357	12,074	872	7,229	(NA)	23,132	159,262	45,530	(3)	(3)
For consumption.....	21,033	20,995	177,842	xxx	xxx	xxx	23,548	23,132	159,262	{	xxx	xxx
For agglomeration.....	13,536	1,540	12,515	xxx	xxx	xxx	(NA)				xxx	xxx
Agglomerates.....	13,793	13,698	169,734	xxx	xxx	xxx	5,531	5,476	62,455	xxx	xxx	xxx
Middle Atlantic:												
Crude ore ¹	7,330	94	1,627	7,200	(D)	(D)	54,088	53,988	548,179	610,893	(6)	(D)
Concentrates, total.....	3,190	787	14,428	2,210	(D)	(D)	(5)	(5)	(5)	(6)	(6)	(D)
For consumption.....	809	787	14,428	xxx	xxx	xxx	(5)	(5)	(5)	xxx	xxx	xxx
For agglomeration.....	2,381			xxx	xxx	xxx	(NA)	(5)	(5)	xxx	xxx	xxx
Agglomerates.....	2,239			xxx	xxx	xxx	(5)	(5)	(5)	xxx	xxx	xxx
North Central:												
Crude ore, total ¹	86,433	41,386	236,280	44,068	16,486	32,973	80,575	(D)	727,656	239,350	(2)	(D)
Direct-shipping ore.....	27,578	26,608	212,722	xxx	xxx	xxx	41,278	40,355	267,224	xxx	xxx	xxx
Beneficiating-grade ore	58,855	14,778	23,558	xxx	xxx	xxx	39,297	(D)	75,432	xxx	xxx	xxx
Concentrates, total.....	25,926	17,894	143,979	(D)	(D)	(D)	(NA)	18,705	125,288	41,558	(4)	(D)
For consumption.....	16,283	17,894	143,979	xxx	xxx	xxx	18,993	18,705	125,288	{	xxx	xxx
For agglomeration.....	9,643			xxx	xxx	xxx	(NA)				xxx	xxx
Agglomerates.....	9,399			xxx	xxx	xxx	1,391				1,335	12,398
Michigan:												
Crude ore ¹	9,172	7,523	63,936	(D)	(D)	(D)	11,223	(D)	(D)	(NA)	(NA)	(NA)
Direct shipping ore (included above), concen- trates for consumption and agglomerates.....	8,509	8,254	71,729	...	(D)	(D)	10,765	9,723	871,697	...	...	...

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

Table 3.—PRIMARY PRODUCTS OF THE IRON ORES INDUSTRY PRODUCED IN ALL INDUSTRIES, BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954—Continued
(Includes ferruginous manganese and manganiferous iron ores valued chiefly for their iron content)

Product, region or division, and State	1958						1954					
	Production	Shipments includ- ing interplant transfers		Minerals prepared			Production	Shipments includ- ing interplant transfers		Minerals prepared		
		Quantity	Value	Produced and prepared at same estab- lishment	Received from other establish- ments for preparation			Quantity	Value	Produced and prepared at same estab- lishment	Received from other establish- ments for preparation	
					Quantity	Cost					Quantity	Cost
	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)
North Central—Continued												
Minnesota:												
Crude ore, total ¹	74,862	32,953	164,577	42,080	16,089	29,552	67,436	(D)	⁸ 193,339	² 38,163	(²)	(D)
Direct-shipping ore....	15,511	16,422	129,491	{ xxx	xxx	xxx	29,328	29,474	188,949	xxx	xxx	xxx
Beneficiating-grade ore	9,180			{ xxx	xxx	xxx	38,108	(D)	⁸ 4,390	xxx	xxx	xxx
Concentrates, total.....	24,691	16,422	129,491	(D)	(D)	(D)	(NA)	18,260	121,432	⁴ 1,558	(⁴)	(D)
For consumption.....	15,511	16,422	129,491	xxx	xxx	xxx	18,512	18,260	121,432	{ xxx	xxx	xxx
For agglomeration.....	9,180			xxx	xxx	xxx	(NA)			{ xxx	xxx	xxx
Agglomerates.....	8,874	8,789	97,486	xxx	xxx	xxx	1,391	1,335	12,398	xxx	xxx	xxx
Wisconsin and Missouri:												
Crude ore.....	2,399	910	7,767	(D)	(D)	(D)	1,916	(D)	(D)	(NA)	(NA)	(NA)
Direct-shipping ore (included above) and concentrates for con- sumption.....	1,965	1,236	11,193	...	...	...	1,666	1,603	⁸ 12,091	...	...	...
South:												
Crude ore, total ¹	8,092	4,637	41,248	² 8,886	(²)	(D)	13,266	(D)	⁸ 22,585	⁹ 11,258	(²)	(D)
Direct-shipping ore....	865	4,637	41,248	{ xxx	xxx	xxx	3,492	3,490	18,443	xxx	xxx	xxx
Beneficiating-grade ore	7,227			{ xxx	xxx	xxx	9,774	(D)	⁸ 4,142	xxx	xxx	xxx
Concentrates, total.....	3,443	1,923	13,852	(D)	(D)	(D)	¹⁰ 3,987	¹⁰ 3,971	¹⁰ 30,999	(⁹)	(⁹)	(D)
For consumption.....	3,443	1,923	13,852	xxx	xxx	xxx	(NA)	(NA)	(NA)	xxx	xxx	xxx
For agglomeration.....				xxx	xxx	xxx	(NA)	(NA)	(NA)	xxx	xxx	xxx
Agglomerates.....	2,154	2,155	35,024	xxx	xxx	xxx	(¹⁰)	(¹⁰)	(¹⁰)	xxx	xxx	xxx
Alabama:												
Crude ore, total ¹	5,093	4,573	41,007	⁶ 7,499	(⁶)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Direct-shipping ore....	802	4,573	41,007	{ xxx	xxx	xxx						
Beneficiating-grade ore	4,291			{ xxx	xxx	xxx						
Concentrates and agglomerates.....	3,800	2,484	33,952	(⁶)	(⁶)	(D)						
Texas:												
Crude ore ¹	2,287	(D)	(D)	2,243	...	...	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Direct shipping ore (included above) concen- trates for consumption and agglomerates.....	938	930	6,937	(D)	...	...				
West:												
Crude ore, total ¹	7,833	4,514	32,122	3,197	...	...	(D)	(D)	(D)	(⁹)	(⁹)	(D)
Direct-shipping ore....	4,669	4,514	32,122	xxx	xxx	xxx	¹¹ 4,993	¹¹ 5,155	¹¹ 35,157	xxx	xxx	xxx
Beneficiating-grade ore	3,164	...	...	xxx	xxx	xxx	(NA)	(NA)	(NA)	xxx	xxx	xxx
Concentrates.....	2,010	1,931	18,098	...	...	...	(¹¹)	(¹¹)	(¹¹)	(⁹)	(⁹)	(D)
Utah:												
Crude ore ¹	3,566	3,462	24,789	...	...	...	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nevada:												
Direct shipping ore and concentrates for consumption.....	647	594	3,623	(D)	...	...	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

D Withheld to avoid approximately disclosing data for individual companies.

xxx Not applicable.

¹Except for materials received from other establishments for preparation, represents only crude iron ores, ferruginous manganese ores, and manganiferous iron ores produced in the Iron Ores Industry.²Figures for crude ore received from others for concentration are combined with figures for crude ore mined and prepared at the same establishment.³Figures for concentrates received from others for agglomeration are combined with figures for crude ore received from others for concentration.⁴Figures for materials received from others for agglomeration are combined with figures for material concentrated and agglomerated at the same establishment.⁵Figures for concentrates (except concentrate fines produced and consumed at the same establishment) and agglomerates are combined with figures for direct shipping (crude) ore. The total excludes beneficiating-grade ore.⁶Figures for quantity of materials agglomerated are combined with figures for quantity of crude ore concentrated and figures for materials received from others are combined with materials prepared at the same establishment where mined.⁷Includes the value of shipments of secondary products for the Iron Ores Industry.⁸Includes the value of shipments of secondary products and receipts for services for the Iron Ores Industry.⁹Figures for West are combined with those for South, also combining figures for materials agglomerated with ores concentrated.¹⁰Figure for agglomerates are combined with figures for concentrates.¹¹Figures for concentrates are combined with figures for direct-shipping ore.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

April 1960

MIC(P)-10D

COPPER ORES INDUSTRY

(S.I.C. CODE 1021)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Copper Ores Industry were valued at \$450.8 million, a decrease of 11 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 2 percent from 1954 to 1958 to a total of 27.3 thousand employees in 1958. Value added in mining in the industry amounted to \$261.5 million in 1958, a decrease of 22 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work,

and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE COPPER ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	144	210	² 51	143
With 20 or more employees.....	..do.....	38	41	(NA)	³ 68
All employees:					
Number.....	Number.....	27,316	27,813	26,752	⁴ 47,967
Payroll.....	Thousand dollars..	142,117	136,065	42,564	⁴ 83,336
Production and development workers:					
Number.....	Number.....	20,861	21,544	23,844	44,502
Man-hours.....	Thousands.....	40,954	46,676	51,239	(NA)
Wages.....	Thousand dollars..	106,226	98,491	34,486	73,200
Value added in mining.....	..do.....	261,465	334,876	108,494	221,690
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	217,179	232,242	33,140	61,827
Minerals received for preparation only.....	..do.....	89,011	100,693	(NA)	(NA)
Contract work only.....	..do.....	22,185	43,873	511	2,595
Cost of purchased machinery installed.....	..do.....	17,901	23,821	(NA)	13,084
Value of shipments and receipts.....	..do.....	450,750	508,729	145,590	(NA)
Value of net shipments and receipts.....	..do.....	367,584	409,911	141,634	⁵ 283,517
Capital expenditures.....	..do.....	45,795	82,210	(NA)	(NA)

NA Not available

¹Excludes nonproducing operations.²Represents number of mines.³Represents number of establishments with 21 or more production and development workers.⁴Excludes employees at central offices maintained independently of mine offices.⁵Represents value of products.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

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The Copper Ores Industry represents establishments primarily engaged in mining, milling, or otherwise preparing copper ores. This industry also includes establishments primarily engaged in the recovery of copper concentrates by precipitation and leaching of copper ore. Establishments primarily engaged in the recovery of refined copper by leaching copper concentrates are classified in the Primary Metal Manufacturing Industries. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Copper Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Copper Ores Industry amounted to \$450.8 million dollars. Of this total, \$434.5 million represented products primary to the industry and \$16.3 million products primary to other industries, receipts for contract services, and products purchased and resold without further processing.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures, appearing in table 3, indicate that the value of copper concentrates shipped by all producers was \$317.1 million, and that the value of copper precipitates shipped was \$31.6 million. Of the total value of copper concentrates shipped, \$306.9 million or 97 percent represented shipments by establishments classified in the Copper Ores Industry, while the remainder

represented shipments as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of gross shipments and receipts for the Copper Ores Industry in 1958 was \$450.8 million and the value of net shipments and receipts was \$367.6 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.—GENERAL STATISTICS FOR THE COPPER ORES INDUSTRY BY STATES: 1958 AND 1954

State	1958												1954	
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)		
United States, total.....	144	38	27,316	142,117	20,861	40,954	106,226	261,465	217,179	17,901	450,750	45,795	27,813	334,876
Arizona.....	53	17	13,073	70,512	10,158	20,698	53,592	158,545	68,777	4,265	205,600	25,987	11,492	165,668
Other States ¹	91	21	14,243	71,605	10,703	20,256	52,634	102,920	148,402	13,636	245,150	19,808	16,321	169,208

¹For 1958, represents: Maine, 2 establishments; Michigan, 6 establishments; Virginia, 2 establishments; Vermont, Missouri, Nebraska, North Carolina, and Texas, 1 establishment each; Montana, 8 establishments; Idaho, 7 establishments; Wyoming, 1 establishment; Colorado, 4 establishments; New Mexico and Utah, 11 establishments each; Nevada, 16 establishments; Washington and Oregon, 4 establishments each; and California, 10 establishments.

Table 3.--PRIMARY PRODUCTS OF THE COPPER ORES INDUSTRY PRODUCED IN ALL INDUSTRIES, BY STATES: 1958 AND 1954

1958 CENSUS OF MINERAL INDUSTRIES

Product and State	1958										1954				
	Shipments in- cluding inter- plant transfers					Gross quantity of metals contained					Shipments in- cluding inter- plant transfers				
	Produc- tion (1,000 short tons)	Quan- tity (1,000 short tons)	Value (\$1,000)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)	Produc- tion (1,000 short tons)	Quan- tity (1,000 short tons)	Value (\$1,000)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Gross quantity of metals contained ¹
UNITED STATES															
Crude ore (Copper ores industry)	111,957	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	90,992	xxx	xxx	1,802,885	261	14,395	9,698
Mined.....	xxx	749	12,733	61,915	516	486	34.7	1,070	xxx	34,056	329,278	139,128	242	1,393	1,453
Shipped to smelters ²	xxx	46,878	83,166	849,826	(D)	(D)	460.4	5,582	xxx	35,556	98,818	712,615	19	2,058	5,179
Shipped to mills ²															
Prepared: ²															
Mined and prepared at same establishment.....	63,491	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	52,851	xxx	xxx	946,738	(D)	11,918	2,900
Received from other establish- ments for preparation.....	xxx	47,257	89,011	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	35,539	100,693	712,065	(D)	1,978	5,169
Copper concentrates	3,294	3,172	317,088	1,670,728	(D)	...	425.7	7,229	2,838	2,835	336,340	1,384,776	789	395	6,853
(All industries) ⁴	xxx	112	31,625	174,747	xxx	xxx	xxx	xxx	xxx	90	28,323	136,138	xxx	xxx	xxx
Copper precipitates ⁴															
(All industries) ⁴	56,525	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	43,095	xxx	xxx	863,315	39	12,808	3,882
Crude ore (Copper ores industry):	xxx	721	14,446	82,738	6	3	38.6	904	xxx	33,871	328,668	135,331	(D)	3,383	1,390
Mined.....															
Shipped to smelters and mills ² ..															
Prepared (Mined and prepared at same establishment and received from other establishments for preparation) ²	54,775	(5)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Copper concentrates and precipi- tates (All industries) ⁴	1,731	1,657	188,194	871,175	...	...	677.8	62,743	61,276	1,303	169,955	635,230	...	6243	62,076
Other States															
Crude ore (Copper ores industry):	55,432	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	47,897	xxx	xxx	939,570	222	1,587	5,816
Mined.....	xxx	46,896	81,453	829,003	(D)	(D)	456.5	5,748	xxx	335,741	399,428	716,412	(D)	68	5,242
Shipped to smelters and mills ² ..															
Prepared (Mined and prepared at same establishment and received from other establishments for preparation) ²	55,975	(5)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Copper concentrates and precipi- tates (All industries) ⁴	61,563	1,627	160,519	974,300	(D)	...	637.9	64,486	61,562	1,622	194,708	885,684	6789	6152	64,777

D Withheld to avoid approximate disclosure of figures for individual companies. NA Not available. xxx Not applicable. For concentrates, precipitates, and old tailings, represents recoverable metal content. ²Includes old tailings. ³Includes leaching ores shipped in crude form to leaching plants operated in conjunction with manufacturing establishments, such as refineries. ⁴For 1958, represents copper precipitates produced in and shipped by establishments classified in the Copper Ores Industry. No production or shipments of such precipitates were reported by establishments classified in other industries. ⁵Figure for quantity of crude ore received from other establishments for preparation is combined with figure for quantity mined and prepared at the same establishment. ⁶Represents copper concentrates only.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-10E

LEAD AND ZINC ORES INDUSTRY

(S.I.C. Code 1031)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Lead and Zinc Ores Industry were valued at \$120.3 million, a decrease of 32 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 30 percent from 1954 to 1958 to a total of 11.5 thousand employees in 1958. Value added in mining in the industry amounted to \$74.3 million in 1958, a decrease of 31 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.—GENERAL STATISTICS FOR THE LEAD AND ZINC ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	¹ 1929
Establishments:					
Total.....	Number.....	281	520	² 260	303
With 20 or more employees.....	...do.....	51	90	(NA)	³ 174
All employees:					
Number.....	Number.....	11,537	16,566	17,725	⁴ 27,725
Payroll.....	Thousand dollars..	56,498	71,363	25,337	⁴ 44,244
Production and development workers:					
Number.....	Number.....	8,682	13,592	15,731	25,907
Man-hours.....	Thousands.....	17,403	27,554	32,481	(NA)
Wages.....	Thousand dollars..	38,271	53,676	20,253	39,191
Value added in mining.....	...do.....	74,255	107,409	47,310	84,793
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	52,327	74,116	15,341	27,635
Minerals received for preparation only.....	...do.....	21,517	35,116	(NA)	(NA)
Contract work only.....	...do.....	2,938	6,080	363	1,653
Cost of purchased machinery installed.....	...do.....	2,241	5,942	(NA)	3,752
Value of shipments and receipts.....	...do.....	120,316	175,947	72,648	(NA)
Value of net shipments and receipts.....	...do.....	103,583	140,132	62,651	⁵ 112,428
Capital expenditures.....	...do.....	8,507	11,520	(NA)	(NA)

NA Not available.

¹Excludes nonproducing operations.²Represents number of mines.³Represents number of establishments with 21 or more production and development workers.⁴Excludes employees at central offices maintained independently of mine offices.⁵Represents value of products.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

The value of shipments during 1958 for the Lead Ores Subindustry was \$75.4 million, a decrease of 21 percent from 1954. Average employment, at 6.8 thousand in 1958, represented a decrease of 22 percent from 1954 and value added decreased 23 percent, amounting to \$48.2 million in 1958. For the Zinc Ores Subindustry the value of shipments in 1958, \$45.0 million, represented a decrease of 45 percent from 1954. Average employment, at 4.7 thousand in 1958, represented a decrease of 40 percent from 1954 and value added, at \$26.0 million in 1958, a decrease of 42 percent.

The Lead and Zinc Ores Industry represents establishments primarily engaged in mining, milling, or otherwise preparing lead ores, zinc ores, or lead-zinc ores. The Lead Ores Subindustry represents such establishments at which the principal metal contained in ores mined or milled, measured by value, was lead. The Zinc Ores Subindustry represents such establishments at which the principal metal contained in ores mined or milled, measured by value, was zinc.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Lead and Zinc Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Lead and Zinc Ores Industry amounted to \$120.3 million. Of this total, \$117.0 million were products primary to the industry, and \$3.3 million were products primary to other industries and receipts for services.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures, appearing in table 3, indicate that the value of lead and

zinc crude ores and concentrates shipped by all producers of such products was \$120.0 million in 1958. Of this total, \$117.0 million or 97.5 percent represented shipments by establishments classified in the Lead and Zinc Ores Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of gross shipments and receipts for the Lead and Zinc Ores Industry in 1958 was \$120.3 million and the value of net shipments and receipts was \$103.6 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1B.—GENERAL STATISTICS FOR THE LEAD ORES SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	¹ 1929
Establishments:					
Total.....	Number.....	204	343	² 86	155
With 20 or more employees.....	...do.....	25	41	(NA)	³ 76
All employees:					
Number.....	Number.....	6,827	8,720	8,052	⁴ 14,951
Payroll.....	Thousand dollars..	33,570	39,002	12,841	⁴ 25,463
Production and development workers:					
Number.....	Number.....	5,414	7,156	7,041	14,007
Man-hours.....	Thousands.....	11,004	14,654	14,194	(NA)
Wages.....	Thousand dollars..	24,114	29,549	9,979	22,917
Value added in mining.....	...do.....	48,214	62,713	24,277	51,738
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	30,198	34,443	7,190	15,824
Minerals received for preparation only.....	...do.....	11,353	14,197	(NA)	(NA)
Contract work only.....	...do.....	2,094	2,829	149	1,032
Cost of purchased machinery installed.....	...do.....	1,390	2,878	(NA)	1,904
Value of shipments and receipts.....	...do.....	75,364	94,874	34,517	(NA)
Value of net shipments and receipts.....	...do.....	67,890	77,201	31,467	⁵ 67,562
Capital expenditures.....	...do.....	4,438	5,160	(NA)	(NA)

NA Not available.

¹Excludes nonproducing operations.²Represents number of mines.³Represents number of establishments with 21 or more production and development workers.⁴Excludes employees at central offices maintained independently of mine offices.⁵Represents value of products.

Table 1C.—GENERAL STATISTICS FOR THE ZINC ORES SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	¹ 1929
Establishments:					
Total.....	Number.....	77	177	² 174	148
With 20 or more employees.....	...do.....	26	49	(NA)	³ 98
All employees:					
Number.....	Number.....	4,710	7,846	9,673	⁴ 12,774
Payroll.....	Thousand dollars..	22,928	32,361	12,496	⁴ 18,781
Production and development workers:					
Number.....	Number.....	3,268	6,436	8,690	11,900
Man-hours.....	Thousands.....	6,399	12,900	18,287	(NA)
Wages.....	Thousand dollars..	14,157	24,127	10,274	16,274
Value added in mining.....	...do.....	26,041	44,696	23,033	33,055
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	22,129	39,673	8,151	11,811
Minerals received for preparation only.....	...do.....	10,164	20,919	(NA)	(NA)
Contract work only.....	...do.....	844	3,251	214	621
Cost of purchased machinery installed.....	...do.....	851	3,064	(NA)	1,848
Value of shipments and receipts.....	...do.....	44,952	81,073	38,131	(NA)
Value of net shipments and receipts.....	...do.....	35,693	62,931	31,184	⁵ 44,866
Capital expenditures.....	...do.....	4,069	6,360	(NA)	(NA)

NA Not available.

¹Excludes nonproducing operations.²Represents number of mines.³Represents number of establishments with 21 or more production and development workers.⁴Excludes employees at central offices maintained independently of mine offices.⁵Represents value of products.

Table 2.—GENERAL STATISTICS FOR THE LEAD AND ZINC ORES INDUSTRY BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
UNITED STATES														
Lead and zinc ores industry, total....	281	51	11,537	56,498	8,682	17,403	38,271	74,255	52,327	2,241	120,316	8,507	16,566	107,409
Lead ores sub- industry.....	204	25	6,827	33,570	5,414	11,004	24,114	48,214	30,198	1,390	75,364	4,438	8,720	62,713
Zinc ores sub- industry.....	77	26	4,710	22,928	3,268	6,399	14,157	26,041	22,129	851	44,952	4,069	7,846	44,696
NORTHEAST AND NORTH CENTRAL ¹														
Lead and zinc ores industry, total....	43	13	4,449	20,964	3,158	5,932	13,398	23,564	12,725	945	33,856	3,378	5,680	36,830
SOUTH ²														
Lead and zinc ores industry.....	36	9	1,624	7,010	1,127	2,178	4,351	8,105	7,235	607	13,657	2,290	2,376	10,908
WEST ³														
Lead and zinc ores industry.....	202	29	5,464	28,524	4,397	9,293	20,522	42,586	32,367	689	72,803	2,839	8,510	59,671
Lead ores sub- industry.....	172	21	3,791	20,327	3,032	6,631	14,235	30,176	22,550	519	51,245	2,000	5,128	38,669
Zinc ores sub- industry.....	30	8	1,673	8,197	1,365	2,662	6,287	12,410	9,817	170	21,558	839	3,382	21,002
Idaho														
Lead and zinc ores industry.....	41	8	1,946	10,242	1,577	3,511	6,731	11,774	6,512	200	17,670	816	2,522	18,162
Utah														
Lead and zinc ores industry.....	27	6	1,143	6,157	897	1,870	4,506	9,587	11,418	139	20,641	503	1,686	13,512

¹For 1958, represents for the Lead and Zinc Ores Industry: New York, 2 establishments; New Jersey, Pennsylvania, and Ohio, 1 establishment each; Illinois, 5 establishments; Wisconsin and Missouri, 8 establishments each; North Dakota, 1 establishment; and Kansas, 16 establishments.

²For 1958, represents for the Lead and Zinc Ores Industry: Virginia, 3 establishments; Tennessee, 7 establishments; Arkansas, 1 establishment; Oklahoma, 24 establishments; and Texas, 1 establishment.

³In addition to the States shown, for 1958, represents for the Lead and Zinc Ores Industry: Montana, 25 establishments; Colorado, 37 establishments; New Mexico, 15 establishments; Arizona, 19 establishments; Nevada, 18 establishments; Washington, 12 establishments; and California, 8 establishments.

Table 3. —PRIMARY PRODUCTS OF THE LEAD AND ZINC ORES INDUSTRY IN THE UNITED STATES PRODUCED IN ALL INDUSTRIES, BY REGIONS AND STATES: 1958 AND 1954

Product, region, and State	1958							1954								
	Production (1,000 short tons)	Shipments including interplant transfers			Gross quantity of metals contained				Production (1,000 short tons)	Shipments including interplant transfers			Gross quantity of metals contained ¹			
		Quantity (1,000 short tons)	Value (\$1,000)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Copper (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)		Quantity (1,000 short tons)	Value (\$1,000)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Copper (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)
UNITED STATES																
Crude ore:																
Mined:																
Lead and zinc ores industry, total.....	14,359	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	18,526	xxx	xxx	674,446	1,061,588	28,949	154.5	
Lead ores subindustry.....	8,717	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	9,698	xxx	xxx	xxx	xxx	(NA)	(NA)	
Zinc ores subindustry.....	5,642	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	8,828	xxx	xxx	xxx	xxx	(NA)	(NA)	
Shipped to smelters: ²																
Lead and zinc ores industry, total.....	xxx	294	5,935	35,979	30,606	4,332	28.7	2,311	xxx	451	6,773	23,751	47,794	5,693	17.4	
Lead ores subindustry.....	xxx	294	5,935	35,979	30,606	4,332	28.7	2,311	xxx	165	3,097	23,751	47,794	5,693	17.4	
Zinc ores subindustry.....	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	286	3,676	xxx	xxx	xxx	xxx	
Shipped to mills: ²																
Lead and zinc ores industry, total.....	2,688	16,733	7,474	88,890	221,149	6,662	18.7	3,341	xxx	5,331	35,815	174,366	398,914	8,839	67.1	
Lead ores subindustry.....	xxx	628	7,474	69,923	59,648	3,493	15.0	2,257	xxx	xxx	xxx	xxx	xxx	xxx	xxx	
Zinc ores subindustry.....	xxx	2,060	9,259	18,967	161,501	3,169	3.7	1,084	xxx	xxx	xxx	xxx	xxx	xxx	xxx	
Prepared: ²																
Mined and prepared at same establishment:																
Lead and zinc ores industry, total.....	11,904	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	14,448	xxx	xxx	504,770	627,184	12,965	74.6	
Lead ores subindustry.....	8,362	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	9,866	xxx	xxx	435,251	121,676	10,434	37.4	
Zinc ores subindustry.....	3,542	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	4,582	xxx	xxx	69,519	505,508	2,551	37.2	
Received from other establishments for preparation:																
Lead and zinc ores industry, total.....	2,987	21,517	10,164	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	5,493	35,116	175,462	406,546	10,544	68.5	
Lead ores subindustry.....	xxx	609	11,353	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	764	14,197	107,582	104,634	4,876	53.1	
Zinc ores subindustry.....	xxx	2,378	10,164	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	4,729	20,919	67,480	301,912	5,668	15.4	
Concentrates:																
All industries:																
Lead concentrates.....	385	54,770	42,611	498,128	29,936	6,159	52.3	8,096	470	472	75,793	592,814	19,011	8,389	64.0	
Zinc concentrates.....	748	761	42,611	23,758	796,307	5,170	12.3	2,122	900	890	56,051	19,966	849,924	4,501	14.9	
NORTHEAST AND NORTH CENTRAL																
Crude ore:																
Mined:																
Lead and zinc ores industry.....	7,947	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	9,511	xxx	xxx	274,289	344,035	5,125	...	
Prepared: ²																
Mined and prepared at same establishment																
(lead and zinc ores industry).....	3,829	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	9,502	xxx	xxx	283,347	228,062	5,125	...	
Received from other establishments for																
preparation (lead and zinc ores industry).....	xxx	(3)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	831	2,220	6,931	57,649	...	...
Lead and zinc concentrates (all industries).....	353	359	32,390	242,240	192,820	406	...	235	484	487	45,471	264,140	227,526	1,891	...	
SOUTH																
Crude ore:																
Mined (lead and zinc ores industry).....	2,671	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	4,023	xxx	xxx	42,735	219,309	...	...
Shipped to smelters and mills (lead and zinc																
ores industry) ²	xxx	911	2,060	7,720	45,469	...	(D)	(D)	xxx	(D)	(D)	(D)	(D)	...	...
Prepared: ²																
Mined and prepared at same establishment																
(lead and zinc ores industry).....	3,890	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	1,804	xxx	xxx	13,872	112,640	...	...
Received from other establishments for																
preparation (lead and zinc ores industry).....	xxx	(3)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	3,033	7,427	33,570	125,326	...	...
Lead and zinc concentrates (all industries).....	171	182	11,346	18,281	200,221	...	...	...	213	206	16,640	42,093	204,213	...	...
WEST																
Crude ore:																
Mined:																
Lead and zinc ores industry, total.....	3,741	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	4,992	xxx	xxx	357,422	498,244	23,824	154.5	
Lead ores subindustry.....	2,532	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	2,761	xxx	xxx	xxx	xxx	(NA)	(NA)	
Zinc ores subindustry.....	1,209	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	2,231	xxx	xxx	xxx	xxx	(NA)	(NA)	
Shipped to smelters (lead and zinc ores industry) ²																
Shipped to mills (lead and zinc ores industry) ²	xxx	292	5,877	35,506	29,876	4,332	28.6	2,311	xxx	269	4,781	23,393	2,633	5,693	17.4	
	xxx	796	12,426	78,172	119,275	6,661	18.7	3,305	xxx	1,601	25,643	129,446	198,477	8,839	67.1	

See footnotes at end of table.

Table 3.—PRIMARY PRODUCTS OF THE LEAD AND ZINC ORES INDUSTRY IN THE UNITED STATES PRODUCED IN ALL INDUSTRIES, BY REGIONS AND STATES: 1958 AND 1954.—Continued

Product, region, and State	1958							1954										
	Production (1,000 short tons)	Shipments including interplant transfers			Gross quantity of metals contained				Production (1,000 short tons)	Shipments including interplant transfers			Gross quantity of metals contained ¹					
		Quantity (1,000 short tons)	Value (\$1,000)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Copper (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)		Quantity (1,000 short tons)	Value (\$1,000)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Copper (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)		
WEST—Continued																		
Crude ore—Continued																		
Prepared: ²																		
Mined and prepared at same establishment:																		
Lead and zinc ores industry, total.....	2,700	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)		} 3,142	xxx	xxx	207,551	286,482	7,840	74.6	7,322	
Lead ores subindustry.....	1,951	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)										
Zinc ores subindustry.....	749	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)										
Received from other establishments for preparation (lead and zinc ores industry).....	xxx	1,062	17,045	(NA)	(NA)	(NA)	(NA)	(NA)		xxx	1,629	25,469	134,961	223,571	10,544	68.5	7,258	
Concentrates:																		
All industries:																		
Lead concentrates.....	206	206	29,555	238,899	28,366	5,753	52.3	7,862		253	254	40,153	286,612	18,938	6,498	64.0	} 12,423	
Zinc concentrates.....	403	399	24,090	22,466	404,836	5,170	12.3	2,121		420	415	29,580	19,935	418,258	4,501	14.9		
Idaho																		
Crude ore:																		
Mined (lead and zinc ores industry).....	865	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)		1,250	xxx	xxx	134,825	113,280	829	5.6	4,914	
Shipped to smelters (lead and zinc ores industry) ²	xxx	13	173	1,435	698	11	0.3	20		xxx	8	230	1,510	305	34	0.1	49	
Shipped to mills (lead and zinc ores industry) ²	xxx	86	2,017	11,549	5,853	228	1.5	1,021		xxx	133	2,484	12,798	11,933	135	0.3	664	
Prepared: ²																		
Mined and prepared at same establishment (lead and zinc ores industry).....	3853	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)		1,137	xxx	xxx	121,048	101,909	626	5.3	4,191	
Received from other establishments for preparation (lead and zinc ores industry).....	xxx	(³)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)		xxx	129	2,165	12,920	11,752	209	0.4	759	
Concentrates:																		
All industries:																		
Lead concentrates.....	73	73	11,542	94,284	11,586	560	1.2	3,668		90	90	16,357	119,715	8,934	682	1.1	4,282	
Zinc concentrates.....	74	74	3,923	3,732	75,468	67	0.8	316		90	93	5,507	4,953	91,580	36	0.8	397	
Utah																		
Crude ore:																		
Mined (lead and zinc ores industry).....	502	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)		626	xxx	xxx	100,663	84,482	5,327	50.3	3,367	
Shipped to smelters and mills (lead and zinc ores industry) ²	xxx	521	9,128	78,939	87,649	4,472	25.8	2,468		xxx	624	13,522	95,842	71,801	4,312	49.6	3,237	
Nevada																		
Crude ore:																		
Mined (lead and zinc ores industry).....	7	xxx	xxx	xxx	(NA)	(NA)	(NA)	(NA)		71	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	
Shipped to smelters (lead ores subindustry) ²	xxx	22	1,051	7,116	1,093	31	6.7	271		xxx	(D)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	

D Withheld to avoid approximate disclosure of figures for individual companies.

NA Not available.

xxx Not applicable.

¹For concentrates and old tailings, represents recoverable metal content.²Includes old tailings.³Figure for quantity of crude ore received from others for preparation is combined with the figure for crude ore mined and prepared at the same establishment.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

May 1960

MIC(P)-10F

GOLD

(S.I.C. CODES 1042 AND 1043)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Lode Gold Industry were valued at \$29.5 million, an increase of 3 percent over 1954, according to preliminary results obtained from the 1958 Census of Minerals Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 14 percent from 1954 to 1958 to a total of 2,6 thousand employees in 1958. Value added in mining in the industry amounted to \$22.6 million in 1958, an increase of 3 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

During 1958, shipments of the Placer Gold Industry in the United States, excluding Alaska, were valued at \$6.3 million, an increase of 7 percent over 1954. Average employment in this industry was 360, a decrease of 35 percent from 1954. Value added in mining in the industry amounted to \$4.9 million, an increase of 35 percent over 1954.

The Lode Gold Industry represents establishments primarily engaged in mining gold ores from lode deposits. In addition to ore dressing methods such as crushing, grinding, gravity concentration, and froth flotation, this industry includes amalgamation, cyanidation, and the production of bullion at the mine or mill site.

The Placer Gold Industry represents establishments primarily engaged in recovery of gold from placer deposits, by any method. This industry includes the production of bullion at the mine, mill, or dredge site.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Lode Gold Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Lode Gold Industry amounted to \$29.5 million, of which more than 99 percent were primary products. Also, of the total value of shipments and other receipts of the Placer Gold Industry, \$6.3 million, primary products constituted more than 99 percent.

The total value of shipments for an industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that \$27.8 million was the value of gold concentrates and mill bullion and precipitates shipped by all producers of such products. These are primary products of the Lode Gold Industry. Of this total, \$25.3 million or 91 percent were shipped by establishments classified in the Lode Gold Industry, while the remainder was shipped as secondary products by establishments classified in other industries. There were no shipments of primary products of the Placer Gold Industry reported by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation.

In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 1A.--GENERAL STATISTICS FOR THE LOSE GOLD INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	¹ 1939	¹ 1929
Establishments:					
Total.....	Number.....	228	298	² 872	174
With 20 or more employees.....	...do.....	12	14	(NA)	³ 38
All employees:					
Number.....	Number.....	2,595	3,020	19,254	⁴ 5,796
Payroll.....	Thousand dollars...	12,495	12,269	31,375	⁴ 9,787
Production and development workers:					
Number.....	Number.....	2,234	2,634	17,591	5,353
Man-hours.....	Thousands.....	4,632	5,894	41,522	(NA)
Wages.....	Thousand dollars...	10,705	10,406	27,304	8,656
Value added in mining.....	...do.....	22,585	21,884	66,523	11,713
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	7,705	7,900	19,541	5,937
Contract work only.....	...do.....	218	320	1,020	556
Cost of purchased machinery installed.....	...do.....	862	910	(NA)	1,085
Value of shipments and receipts.....	...do.....	29,464	28,517	92,942	(NA)
Value of net shipments and receipts.....	...do.....	28,202	26,892	86,064	⁵ 17,650
Capital expenditures.....	...do.....	1,688	2,177	(NA)	(NA)

NA Not available. ¹Excludes nonproducing operations. For 1929 the figure for number of establishments includes nonproducing operations. ²Represents number of mines. ³Represents number of establishments with 21 or more production and development workers. ⁴Excludes employees at central offices maintained independently of mine offices. ⁵Represents value of products.

Table 1B.--GENERAL STATISTICS FOR THE PLACER GOLD INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	¹ 1929
Establishments:					
Total.....	Number.....	65	136	² 340	32
With 20 or more employees.....	...do.....	3	4	(NA)	³ 5
All employees:					
Number.....	Number.....	360	556	3,705	⁴ 668
Payroll.....	Thousand dollars...	1,784	2,311	6,794	⁴ 1,230
Production and development workers:					
Number.....	Number.....	320	501	3,228	578
Man-hours.....	Thousands.....	725	1,255	8,088	(NA)
Wages.....	Thousand dollars...	1,509	1,997	5,632	970
Value added in mining.....	...do.....	4,875	3,614	21,935	2,582
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	1,641	2,504	6,092	1,197
Cost of purchased machinery installed.....	...do.....	56	302	(NA)	359
Value of shipments and receipts.....	...do.....	6,319	5,916	28,027	3,779
Capital expenditures.....	...do.....	253	504	(NA)	(NA)

NA Not available. ¹Except for number of establishments, excludes nonproducing operations. ²Represents number of mines. ³Represents number of establishments with 21 or more production and development workers. ⁴Excludes employees at central offices maintained independently of mine offices.

Table 2.--GENERAL STATISTICS FOR THE LOSE GOLD INDUSTRY BY DIVISIONS AND STATES: 1958 AND 1954

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts for services	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
LODE GOLD INDUSTRY														
United States, total.....	228	12	2,595	12,495	2,234	4,632	10,705	22,585	7,705	862	29,464	1,688	3,020	21,884
Pacific ¹	83	6	211	817	276	577	1,289	4,818	1,199	159	5,685	491	1,180	6,808
Colorado.....	40	3	197	722	176	374	650	1,424	1,610	85	2,873	246	318	1,823
Other States ²	105	3	2,187	10,956	1,782	3,681	8,766	16,343	4,896	618	20,906	951	1,522	13,253

¹For 1958, represents Washington and Oregon, 11 establishments each; and California, 61 establishments.

²For 1958, represents North Dakota, Nebraska, North Carolina, and Oklahoma, 1 establishment each; South Dakota, 4 establishments; Montana, 28 establishments; Idaho, 18 establishments; Wyoming, 1 establishment; New Mexico, 2 establishments; Arizona, 8 establishments; Utah, 9 establishments; and Nevada, 31 establishments.

Table 3A.--PRIMARY PRODUCTS OF THE LODE GOLD INDUSTRY IN THE UNITED STATES PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

1958 CENSUS OF MINERAL INDUSTRIES

Product, division, and State	1958						1954									
	Production	Shipments including interplant transfers		Gross quantity of metals contained				Production	Shipments including interplant transfers		Gross quantity of metals contained ¹					
		Quantity (1,000 short tons)	Value (\$1,000)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)	Copper (1,000 pounds)	Lead (1,000 pounds)		Zinc (1,000 pounds)	Quantity (1,000 short tons)	Value (\$1,000)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)
UNITED STATES																
Crude ore (Lode Gold Industry):																
Mined.....	2,358	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	2,248	xxx	803.7	606	73	239	401	
Shipped to smelters ²	xxx	92	1,238	40.2	132	36	(D)	(D)	xxx	67	757	28.7	24	31	33	
Shipped to mills ²	xxx	92	1,262	42.4	51	43	(D)	(D)	xxx	173	1,625	71.0	34	47	98	
Mined and prepared at same establishments and received from other establishments for preparation ² ..	32,288	(3)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	2,055	142	1,274	768.5	523	14	103	73
Gold concentrates (all industries).....	3	3	3,658	88.3	573	(D)	(D)	(D)	4	4	1,429	36.7	175	10	86	48
Mill bullion and precipitates (all industries), total.	xxx	xxx	24,110	683.5	352	xxx	xxx	xxx	xxx	xxx	25,134	713.2	303	xxx	xxx	xxx
Recovered by amalgamation.....	xxx	xxx	24,110	683.5	107	xxx	xxx	xxx	xxx	xxx	14,965	425.5	94	xxx	xxx	xxx
Recovered by cyanidation.....	xxx	xxx	24,110	683.5	245	xxx	xxx	xxx	xxx	xxx	10,169	287.7	209	xxx	xxx	xxx
PACIFIC																
Crude ore (Lode Gold Industry):																
Mined.....	243	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	304	xxx	146.7	331	14	106	78	
Mined and prepared at the same establishment and received from other establishments for preparation ²	3,105	(3)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	251	(3)	(D)	125.3	304	12	91	65
COLORADO																
Crude ore (Lode Gold Industry):																
Mined.....	105	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Shipped to smelters and mills ²	xxx	93	1,268	42.5	32	53	(D)	(D)	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
OTHER STATES																
Crude ore mined (Lode Gold Industry).....	2,010	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

D Withheld to avoid approximate disclosure of figures for individual companies. NA Not available. xxx Not applicable. ¹For concentrates, mill bullion, and old tailings, represents recoverable metal content. ²Includes old tailings. ³Figure for quantity of crude ore received from other establishments for preparation is combined with the figure for crude ore mined and prepared at the same establishment.

Table 3B.--PRIMARY PRODUCTS OF THE PLACER GOLD INDUSTRY IN THE UNITED STATES PRODUCED IN ALL INDUSTRIES: 1958 AND 1954

Product	1958				1954			
	Unit of measure		Total production (quantity)	Total shipments including interplant transfers	Total production (quantity)	Total shipments including interplant transfers		
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)	
Placer gold ¹	1,000 fine ounces	180.8	180.8	6,288	170.7	171.2	5,965	
Placer silver ¹	1,000 fine ounces	30	30	231	13	12	10	
Material washed ²	1,000 cubic yards	29,111	29,111	xxx	50,888	xxx	xxx	

xxx Not applicable. ¹For 1958, represents production and shipments of establishments classified only in the placer gold industry. No production or shipments of placer gold or silver was reported by establishments classified in other industries in that year. ²Includes the value of shipments of secondary products of the placer gold industry. ³Represents material washed or treated in the placer gold industry only.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

April 1960

MIC(P)-10G

SILVER ORES

(S.I.C. CODE 1044)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Silver Ores Industry were valued at \$12.5 million, an increase of 3 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 21 percent from 1954 to 1958 to a total of 989 employees in 1958. Value added in mining in the industry amounted to \$10.4 million in 1958, an increase of 5 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE SILVER ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929¹

Item	Unit of measure	1958	1954	1939	1929 ¹
Establishments:					
Total.....	Number.....	59	101	² 166	67
With 20 or more employees.....	do.....	5	3	(NA)	³ 29
All employees:					
Number.....	Number.....	989	1,255	4,627	⁴ 2,813
Payroll.....	Thousand dollars..	5,757	6,038	6,919	⁴ 4,934
Production and development workers:					
Number.....	Number.....	854	1,065	4,256	2,593
Man-hours.....	Thousands.....	1,752	2,214	9,055	(NA)
Wages.....	Thousand dollars..	4,840	5,003	6,017	4,327
Value added in mining.....	do.....	10,365	9,856	16,340	5,891
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	do.....	3,034	2,912	3,376	2,566
Contract work only.....	do.....	150	364	120	138
Cost of purchased machinery installed.....	do.....	285	446	(NA)	424
Value of shipments and receipts.....	do.....	12,546	12,148	21,292	(NA)
Value of net shipments and receipts.....	do.....	12,403	12,051	19,716	⁵ 8,457
Capital expenditures.....	do.....	1,138	1,066	(NA)	(NA)

NA Not available.

¹Excludes nonproducing operations.²Represents number of mines.³Represents number of establishments with 21 or more production and development workers.⁴Excludes employees at central offices maintained independently of mine offices.⁵Represents value of products.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

The Silver Ores Industry represents establishments primarily engaged in mining, milling, or otherwise preparing silver ore. The production of bullion at the mine or mill site is included. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Silver Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries). The total value of shipments and other receipts of establishments classified in the Silver Ores Industry amounted to \$12.5 million. Of this total, approximately 98 percent represented the value of primary products of the industry. There were no shipments reported of silver concentrates and mill bullion, primary products of the Silver Ores Industry, by establishments classified in other industries. The figures for shipments of such products appear in table 3.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of

crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of gross shipments and receipts for the Silver Ores Industry in 1958 was \$12.5 million and the value of net shipments and receipts was \$12.4 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.--GENERAL STATISTICS FOR THE SILVER ORES INDUSTRY: 1958 AND 1954

State	1958												1954	
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States, total.....	59	5	989	5,757	854	1,752	4,840	10,365	3,034	285	12,546	1,138	1,255	9,856
Idaho.....	14	5	878	5,094	793	1,634	4,529	9,490	2,773	257	11,914	606	1,060	8,816
Other States ¹	45	...	111	663	61	118	311	875	261	28	632	532	195	1,040

¹For 1958, represents Montana, 8 establishments; Colorado, 10 establishments; Arizona, 1 establishment; Utah, 9 establishments; Nevada, 13 establishments; and Washington and California, 2 establishments each.

Table 3.--PRIMARY PRODUCTS OF THE SILVER ORES INDUSTRY PRODUCED IN ALL INDUSTRIES, BY STATES: 1958 AND 1954

Product and State	1958										1954						
	Production	Shipments including interplant transfers		Gross quantity of metals contained						Production	Shipments including interplant transfers		Gross quantity of metals contained ¹				
		Quantity	Value	Silver	Gold	Copper	Lead	Zinc	Quantity		Value	Silver	Gold	Copper	Lead	Zinc	
	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 fine ounces)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 fine ounces)	(1,000 fine ounces)	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	
UNITED STATES																	
Crude ore (Silver ores industry):																	
Mined.....	496	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	514	xxx	xxx	12,353	4.8	5,338	11,664	3,656	
Shipped to smelters ²	xxx	41	3,729	412	39	1,022	201	xxx	xxx	100	584	678	(D)	318	(D)	(D)	
Shipped to mills ²	xxx	8	143	70	45	423	351	xxx	xxx	5	97	79	0.2	- 39	425	230	
Prepared: ²																	
Mined and prepared at same establishment and received from other establishments for preparation.....	4,459	(*)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	4,410	(*)	5	11,651	1.5	4,946	8,810	2,914	
Silver concentrates and mill bullion (all industries) ³	21	21	11,674	11,851	1.4	6,496	5,261	392	21	21	11,372	11,174	1.2	4,565	7,706	95	
IDAH0																	
Crude ore (Silver ores industry):																	
Mined.....	440	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	380	xxx	xxx	11,313	0.7	5,052	7,845	475	
Shipped to smelters and mills ² ...	xxx	37	311,914	11,864	2.1	6,481	5,325	411	{	8	78	74	0.2	134	(D)	...	
Silver concentrates (all industries) ³	(D)	(D)							20	20	11,103	10,963	0.5	4,548	7,204	18	
Crude ore mined and prepared at same establishment (Silver ores industry) ²	424	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	4,372	(*)	(NA)	11,239	0.5	4,919	7,827	474	
OTHER STATES																	
Crude ore (Silver ores industry):																	
Mined.....	56	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	134	xxx	xxx	1,040	4.1	286	3,181	(D)	
Shipped to smelters and mills ² ...	xxx	33	632	469	99	1,381	533	{	xxx	97	603	683	(D)	223	(D)	(D)	
Silver concentrates and mill bullion (all industries) ³	(D)	(D)							1	1	269	211	0.7	17	502	77	
Crude ore mined and prepared at same establishment and received from other establishments for preparation (Silver ores industry) ²	435	(*)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)	438	(*)	(NA)	412	1.0	27	983	2,440	

D Withheld to avoid approximate disclosure of figures for individual companies.

NA Not available.

xxx Not applicable.

¹For concentrates and old tailings, represents recoverable metal content.²Includes old tailings.³Includes the value of secondary products shipped.⁴The figure for the quantity of crude ore received from other establishments for preparation is combined with the figure for the quantity of crude ore mined and prepared at the same establishment.⁵For 1958, represents production and shipments only by establishments classified in the Silver Ores Industry. No such production or shipments was reported by establishments classified in other industries.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

December 1959

MIC(P)-10H

BAUXITE

(S.I.C. CODE 1051)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Bauxite Industry were valued at \$18.2 million, an increase of 8 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 22 percent from 1954 to 1958 to a total of 665 employees in 1958. Value added in mining in the industry amounted to \$15.4 million in 1958, an increase of 20 percent from 1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of

shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE BAUXITE INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of quantity	1958	1954	1939 ¹	1929
Establishments:					
Total.....	Number.....	29	25	16	9
With 20 or more employees.....	..do.....	9	6	(NA)	(NA)
All employees:					
Number.....	Number.....	665	852	827	689
Payroll.....	Thousand dollars	3,335	3,581	819	790
Production and development workers:					
Number.....	Number.....	502	661	727	602
Man-hours.....	Thousands.....	902	1,288	1,176	(NA)
Wages.....	Thousand dollars	2,288	2,529	578	513
Value added in mining.....	..do.....	15,421	12,827	1,965	1,781
Cost of supplies, minerals received for preparation, fuel, purchased electricity, and contract work.....	..do.....	2,721	3,946	2,562	2,458
Cost of purchased machinery installed.....	..do.....	1,485	356	(NA)	96
Value of shipments and receipts.....	..do.....	18,217	16,819	(NA)	(NA)
Value of net shipments and receipts.....	..do.....	17,418	16,029	³ 2,527	³ 2,239
Capital expenditures.....	..do.....	1,408	510	(NA)	(NA)

NA Not available.

¹Excludes statistics for two nonproducing mines. Figures for these bauxite operations were combined in 1939 with the figures for two nonproducing manganese ores mines and one chromite mine. For the five nonproducing operations so combined employment averaged 21 for that year and principal expenses (the cost of supplies, minerals received for preparation, fuel, electricity, contract work, wages, and salaries) amounted to approximately \$66,000.

²Excludes cost of minerals (crude and dried bauxite) received for preparation; figures for this item were not available.

³Represents value of products.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of 50 preliminary Census of Mineral reports, \$5.00

The Bauxite, and Other Aluminum Ores, Industry represents establishments engaged primarily in mining, milling, or otherwise preparing bauxite and other aluminum ores. Associated activities such as drying, calcining, activating, and sintering are also included. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

This report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Bauxite Industry consists not only of products described above as primary to the industry, but also includes the value of secondary products (which are primary to other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. In 1958, however, there were no shipments or receipts reported for other than the primary product, bauxite. No bauxite was produced in other industries in 1958.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Net

shipments for the Bauxite Industry in 1958 amounted to \$17.4 million. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

More detailed figures for this industry will appear later in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Also, in this report, there will be a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. (Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.)

BACKGROUND

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The canvass included the continental United States, Alaska, and Hawaii. The figures in this report include the results for establishments located in the continental United States. Alaska and Hawaii were not States until 1959 and will be covered in separate reports.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight. Thus, the next Census will be conducted in 1964 covering mining activity in 1963.

1958 CENSUS OF MINERAL INDUSTRIES

Table 2.--GENERAL STATISTICS FOR THE BAUXITE INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)		
UNITED STATES, TOTAL.....	29	9	665	3,335	502	902	2,288	15,421	2,721	1,483	18,217	1,408	852	12,827
West South Central (Arkansas).....	18	8	603	3,210	447	813	2,182	15,025	2,182	1,468	17,286	1,389	806	12,383
Other States ¹	11	1	62	125	55	89	106	396	539	15	931	19	46	444

¹For 1958, represents Georgia and Alabama. For 1954, represents Georgia, Alabama, and Oregon.

Table 3.--PRIMARY PRODUCTS OF THE BAUXITE INDUSTRY IN THE UNITED STATES: 1958 AND 1954

Item	1958				1954			
	Production	Shipments including interplant transfers			Production	Shipments including interplant transfers		
		Quantity	Dried bauxite equivalent	Value		Quantity	Dried bauxite equivalent	Value
		(1,000 long tons)	(1,000 long tons)	(1,000 long tons)		(\$1,000)	(1,000 long tons)	(1,000 long tons)	($1,000)
Crude bauxite mined.....	1,612	xxx	xxx	xxx	2,353	xxx	xxx	xxx
Crude and dried bauxite shipped to preparation plants.....	xxx	143	117	799	xxx	119	101	790
Crude bauxite shipped to consumers.....	xxx	1,519	1,259	14,807	xxx	1,889	1,607	13,190
Prepared bauxite, total.....	141	142	166	2,611	147	147	159	2,756
Dried ¹	97	98	98	1,110	122	122	122	1,442
Calcined and activated.....	44	44	68	1,501	25	25	37	1,314

xxx Not applicable.

¹Excludes dried bauxite subsequently treated to produce activated bauxite.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-101-1

MANGANESE ORES

(S.I.C. CODE 1062)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments and receipts of the Manganese Ores Industry were valued at \$39.4 million, an increase of 22 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decline of 18 percent from 1954 to 1958 to a total of 2.1 thousand employees in 1958. Value added in mining in the industry amounted to \$20.4 million in 1958, an increase of 13 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy,

contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—SUMMARY STATISTICS FOR THE MANGANESE ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	186	367	¹ 34	19
With 20 or more employees.....	...do.....	24	24	(NA)	(NA)
All employees:					
Number.....	Number.....	2,143	2,604	545	389
Payroll.....	Thousand dollars..	9,231	9,292	566	480
Production and development workers:					
Number.....	Number.....	1,815	2,266	504	354
Man-hours.....	Thousands.....	3,443	4,293	959	(NA)
Wages.....	Thousand dollars..	7,471	7,643	483	392
Value added in mining.....	...do.....	20,435	18,118	707	967
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	20,538	15,240	238	217
Minerals received for preparation only.....	...do.....	10,493	5,382	(NA)	(NA)
Contract work only.....	...do.....	2,898	3,573	...	6
Cost of purchased machinery installed.....	...do.....	750	2,304	(NA)	12
Value of shipments and receipts.....	...do.....	39,422	32,398	² 945	² 1,184
Capital expenditures.....	...do.....	2,301	3,264	(NA)	(NA)

NA Not available.

¹Represents number of mines.²Represents value of net production.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Manganese Ores Industry represents establishments engaged primarily in mining, milling, or otherwise preparing manganese ores, such as pyrolusite, rhodochrosite, psilomelane, and manganite. The mining of ferruginous manganese and manganiferous iron ores valued chiefly for their iron content is classified in the Iron Ores Industry.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Manganese Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Manganese Ores Industry amounted to \$39.4 million. Of this total, \$37.8 million were products primary to the industry and \$1.6 million were products primary to other industries.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in Table 3, indicates that the value of Manganese Ores and Concentrates, including low-grade ores and concentrates shipped to Government purchase depots, shipped by all producers of such products was \$37.9 million. Over 99 percent of this value represented shipments by establishments classified in the Manganese Ores Industry.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in Table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (Tables 1 and 2) with product statistics (Table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE MANGANESE ORES INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)		
United States, total.....	186	24	2,143	9,231	1,815	3,443	7,471	20,435	20,538	750	39,422	2,301	2,604	18,118
East and South.....	43	7	542	1,749	449	784	1,413	4,144	6,281	117	9,938	604	660	3,483
East South Cen- tral (Tennessee)	9	1	121	422	101	203	322	593	443	27	990	73	152	794
West South Cen- tral (Arkansas)	19	4	239	686	206	347	625	1,511	279	27	1,641	176	145	881
Mountain.....	123	17	1,538	7,170	1,312	2,538	5,792	14,590	13,869	590	27,764	1,285	1,826	13,513
Montana.....	28	4	767	4,047	663	1,336	3,345	4,968	6,040	111	10,822	297	1,050	4,957
Arizona.....	63	9	412	1,487	363	602	1,261	4,123	3,473	459	7,252	803	201	2,519
Pacific.....	20	...	63	312	54	121	266	1,701	388	43	1,720	412	118	1,122

Table 3.—PRIMARY PRODUCTS OF THE MANGANESE ORES INDUSTRY PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954
(Excludes ferruginous manganese and manganiferous iron ores valued chiefly for their iron content. These are classified as primary to the Iron Ores Industry.)

Division, State, and Product	1958					1954						
	Production (1,000 long tons)	Shipments including interplant transfers		Minerals prepared			Production (1,000 long tons)	Shipments including interplant transfers		Minerals prepared		
		Quantity (1,000 long tons)	Value (\$1,000)	Mined and prepared estab- lishment (1,000 long tons)	Received from other establishments for preparation			Quantity (1,000 long tons)	Value (\$1,000)	Mined and prepared estab- lishment (1,000 long tons)	Received from other establishments for preparation	
					Quantity (1,000 long tons)	Cost (\$1,000)						Quantity (1,000 long tons)	Cost ($1,000)
United States, total:												
Crude ore, total.....	1,397	511	17,506	1,017	2,482	210,493	1,574	(3)	(3)	863	375	5,382
Direct shipping ore.....	1,142	142	12,453	xxx	xxx	xxx	(NA)	(3)	(3)	xxx	xxx	xxx
Beneficiating-grade ore.....	1,300	369	5,053	xxx	xxx	xxx	(NA)	(3)	(3)	xxx	xxx	xxx
Concentrates and agglomerates, total ⁴	1,553	382	20,375	(3)	(2)	(2)	61,056	3843	331,537	(5)	...	...
Containing less than 35% manganese.....	151	9	286	xxx	xxx	xxx	6,604	3,625	311,963	xxx	xxx	xxx
Containing 35% or more manganese.....	322	310	20,089	xxx	xxx	xxx	6,452	3,218	319,574	xxx	xxx	xxx
East and South:												
Crude ore, total.....	1,192	62	7,907	172	46	5,252	451	(3)	(3)	7364	(7)	81,429
Direct shipping ore.....	162	62	7,907	xxx	xxx	xxx	(NA)	(3)	(3)	xxx	xxx	xxx
Beneficiating-grade ore.....	174	...	...	xxx	xxx	xxx	(NA)	(3)	(3)	xxx	xxx	xxx
Concentrates and agglomerates ⁴	98	81	2,482	...	...	...	6102	394	35,076	(NA)	...	...
East South Central (Tennessee):												
Crude ore.....	14	6	990	(D)	(D)	(D)	158	(3)	(3)	(NA)	(NA)	(NA)
Concentrates and agglomerates ⁴	5	...	...	...	...	...	612	311	31,011	(NA)	...	...
West South Central (Arkansas):												
Crude ore, total.....	49	14	1,211	35	xxx	xxx	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Direct shipping ore.....	14	14	1,211	xxx	xxx	xxx	...	...	...	...	...	...
Beneficiating-grade ore.....	35	...	428	...	...	...	...	...	...	...	...	...
Concentrates and agglomerates ⁴	5	5	...	...	...	...	...	...	...	...	...	...
Mountain:												
Crude ore, total.....	1,140	425	9,152	775	82	1,305	1,067	(3)	(3)	529	322	4,492
Direct shipping ore.....	78	425	9,152	xxx	xxx	xxx	(NA)	(3)	(3)	xxx	xxx	xxx
Beneficiating-grade ore.....	1,063	285	17,084	(3)	(D)	(D)	6,912	3,707	324,977	(NA)	...	...
Concentrates and agglomerates ⁴	438	352	5,109	18	(D)	(D)	341	(3)	(3)	7322	(7)	85,155
Montana:												
Crude ore.....	723	52	4,176	...	(D)	(D)	6,492	3,398	39,867	(NA)	...	...
Concentrates and agglomerates ⁴	65	...	...	...	...	...	...	...	...	...	...	...
Arizona:												
Crude ore, total.....	378	54	2,374	335	(D)	(D)	187	(3)	(3)	(NA)	(NA)	(NA)
Direct shipping ore.....	27	27	1,821	xxx	xxx	xxx	(NA)	(3)	(3)	...	...	...
Beneficiating-grade ore.....	351	27	553	xxx	xxx	xxx	6134	3133	34,029	(NA)	...	...
Concentrates and agglomerates ⁴	113	113	4,878	...	...	...	...	...	...	...	...	...
Pacific:												
Crude ore, total.....	65	24	447	70	(D)	(D)	56	(3)	(3)	723	(7)	891
Direct shipping ore.....	2	2	114	xxx	xxx	xxx	(NA)	(3)	(3)	xxx	xxx	xxx
Beneficiating-grade ore.....	63	22	333	xxx	xxx	xxx	642	342	31,484	(NA)	xxx	xxx
Concentrates and agglomerates ⁴	18	18	1,273	...	...	...	...	...	...	...	...	...

D Withheld to avoid approximately disclosing data for individual companies.

NA Not available.

xxx Not applicable.

¹Crude ore total excludes but direct shipping ore figure includes imported ore merely ground by establishments in the United States.

²Figures for concentrates consumed in sintering are included with figures for crude ores received for preparation.

³Figures for crude ore are included with figures for concentrates and agglomerates.

⁴Represents concentrates, nodules, and sinter (including log-washed material).

⁵Between 100,000 and 250,000 long tons of concentrate fines were agglomerated at the same establishment at which such fines were produced.

⁶Represents production of direct shipping ore, beneficiating-grade ore for transfer to other establishments, and concentrates and agglomerates.

⁷Figure for quantity received from others is included with figure for quantity prepared at same establishment at which mined.

⁸Figure includes cost of supplies other than minerals received from others for preparation.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

January 1960

MIC(P)-101-2

TUNGSTEN ORES

(S.I.C. CODE 1064)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Tungsten Ores Industry were valued at \$14.4 million, a decrease of 76 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 79 percent from 1954 to 1958 to a total of 639 employees in 1958. Value added in mining in the industry amounted to \$8.2 million in 1958, a decrease of 80 percent from 1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and

capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE TUNGSTEN ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	32	549	¹ 53	12
With 20 or more employees.....	...do.....	4	20	(NA)	(NA)
All employees:					
Number.....	...do.....	639	2,987	844	217
Payroll.....	Thousand dollars.	2,896	14,758	1,368	358
Production and development workers:					
Number.....	Number.....	509	2,635	701	186
Man-hours.....	Thousands.....	974	6,327	1,639	(NA)
Wages.....	Thousand dollars.	1,989	13,148	1,114	297
Value added in mining.....	...do.....	8,166	40,744	2,427	540
Cost of supplies, minerals received for preparation, purchased fuel, electric energy, and contract work.....	...do.....	6,283	22,757	927	194
Cost of purchased machinery installed.....	...do.....	100	3,562	(NA)	14
Value of shipments and receipts.....	...do.....	14,430	60,737	² 3,354	² 734
Capital expenditures.....	...do.....	119	6,326	(NA)	(NA)

NA Not available.

¹Represents number of mines.

²Represents value of products.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.
Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00

The Tungsten Ores Industry represents establishments engaged primarily in mining, milling, or otherwise preparing tungsten ores, such as ferberite, huebnerite, scheelite, and wolframite. This report includes figures for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

This report is based on the 1957 Standard Industrial Classification Manual definition of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Tungsten Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Tungsten Ores Industry amounted to \$14.4 million. Of this total, between 80 and 90 percent was products primary to the industry.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure appearing in table 3 indicates that the value of tungsten concentrates shipped by all producers of such products was \$13.7 million, and there were no shipments of tungsten ores. Of the total shipments, between 80 and 90 percent was shipped by establishments classified in the Tungsten Ores Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," and "secondary production," as well as the various statistical items such as "employment," and "value added," etc. Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.--GENERAL STATISTICS FOR THE TUNGSTEN ORES INDUSTRY, BY GEOGRAPHIC DIVISIONS AND STATES: 1958 AND 1954

(In order to avoid approximate disclosure of individual company figures, statistics by Geographic Divisions and States are not published.)

Table 3.--PRIMARY PRODUCTS OF THE TUNGSTEN ORES INDUSTRY IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Item	1958				1954			
	Production		Total shipments including interplant transfers		Production		Total shipments including interplant transfers	
	Quantity (1,000 short tons)	Units of WO ₃ contained (1,000)	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Units of WO ₃ contained (1,000)	Quantity (1,000 short tons)	Value (\$1,000)
Crude ores mined ¹	188	84	...	...	1,938	994	...	...
Tungsten concentrates ²	6	408	6	13,675	25	923	24	55,251

¹Represents crude ores as mined in the Tungsten Ores Industry only.

²Figures for 1954 contain duplication by inclusion of low-grade concentrates shipped to up-grading plants and of high-grade concentrates produced from these low-grade concentrates..

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1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC (P) -101-3

MOLYBDENUM, CHROMIUM, COBALT, NICKEL, AND COLUMBIUM-TANTALUM ORES

(S.I.C. CODE 1069)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified, Industry were valued at \$42.1 million, a decrease of 31 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 9 percent from 1954 to 1958 to a total of 2.7 thousand employees in 1958. Value added in mining in the industry amounted to \$30.4 million in 1958, a decrease of 37 percent from 1954 when the previous census was taken. Shipments of the Chromium Ores Subindustry were valued at \$6.0 million, a decrease of 19 percent from 1954. Average employment in this subindustry was 302, a decrease of 42 percent from 1954. Value added in mining amounted to \$5.7 million, an increase of 1 percent over

1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE FERROALLOY ORES, EXCEPT VANADIUM, NOT ELSEWHERE CLASSIFIED, INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	Industry, total			Chromium ores subindustry			Molybdenum, cobalt, nickel, and columbium-tantalum ores subindustry		
		1958	1954	1939	1958	1954	¹ 1939	1958	1954	1939
Establishments:										
Total.....	Number.....	76	170	² 16	63	158	² 2	13	12	² 14
With 20 or more employees.....	..do.....	7	7	(NA)	1	2	(NA)	6	5	(NA)
All employees:										
Number.....	Number.....	2,707	2,487	1,104	302	525	39	2,405	1,962	1,065
Payroll.....	Thousand dollars	14,756	14,485	2,060	1,657	2,613	54	13,099	11,872	2,006
Production and development workers:										
Number.....	Number.....	2,082	1,937	963	237	454	31	1,845	1,483	932
Man-hours.....	Thousands.....	3,885	4,502	2,088	494	1,015	59	3,391	3,487	2,029
Wages.....	Thousand dollars	10,221	10,539	1,499	1,126	2,216	42	9,095	8,323	1,457
Value added in mining.....	..do.....	30,360	48,537	13,271	5,678	5,617	27	24,682	42,920	13,244
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	14,913	15,319	2,187	823	2,284	20	14,090	13,035	2,167
Contract work only.....	..do.....	3,714	3,359	43	285	436	...	3,429	2,923	43
Cost of purchased machinery installed.....	..do.....	972	2,609	(NA)	185	331	(NA)	787	2,278	(NA)
Value of shipments and receipts.....	..do.....	42,051	60,536	³ 15,458	5,989	7,398	³ 47	36,062	53,138	³ 15,411
Capital expenditures.....	..do.....	4,194	5,929	(NA)	697	834	(NA)	3,497	5,095	(NA)

NA Not available.

¹Except for number of mines, includes data for one antimony mine.²Represents number of mines.³Represents value of net production.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified, Industry represents establishments primarily engaged in mining, milling, or otherwise preparing ferroalloy ores, n.e.c., such as chromite, columbite, and nickel ores. Titanium ore, used sometimes for ferroalloying but principally for other purposes, is classified in Industry 1093.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Ferroalloy Ores, Except Vanadium, N.E.C., Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Ferroalloy Ores, Except Vanadium, N.E.C., Industry amounted to \$42.1 million. Of this total, \$36.6 million were products primary to the industry and \$5.5 million were products primary to other industries. The latter figure represents secondary product shipments by establishments primarily shipping molybdenum, cobalt, and columbium-tantalum ores. There were no shipments of secondary products by establishments primarily shipping chromium or nickel ores.

The total value of shipments of molybdenum concentrates by all establishments in the United States, shown in table 3, was \$34.4 million dollars, of which shipments from establishments primarily engaged in producing and shipping molybdenum concentrates represented between 50 and 60 percent. All shipments of chromium ores and concentrates, shown in table 3

as \$6.0 million, were made by establishments classified in the Chromium Ores Subindustry.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.--GENERAL STATISTICS FOR THE FERROALLOY ORES, EXCEPT VANADIUM, NOT ELSEWHERE CLASSIFIED, INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

(In order to avoid approximate disclosure of individual company figures, statistics by Geographic Divisions and States are not published.)

Table 3.--SELECTED PRIMARY PRODUCTS OF THE FERROALLOY ORES, EXCEPT VANADIUM, NOT ELSEWHERE CLASSIFIED, INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Production (short tons)	Shipments including interplant transfers		Production (short tons)	Shipments including interplant transfers	
		Quantity (short tons)	Value (\$1,000)		Quantity (short tons)	Value (\$1,000)
Crude chromium ores.....	299,789	}	149,365	{	362,000	35,000
Chromium concentrates.....	(D)				145,000	1,349
Molybdenum concentrates.....	35,960		34,350	(D)	(D)	6,049

D Withheld to avoid approximately disclosing data for individual companies.

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Industry and Product Reports

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METAL MINING SERVICES

(S.I.C. CODES 1081 AND 1082)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts for services of the Metal Mining Services Industries were valued at \$32.4 million, a decrease of 16 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in these industries showed a decrease of 31 percent from 1954 to 1958 to a total of 2.1 thousand employees in 1958. Value added in mining services in these industries amounted to \$22.9 million in 1958, a decrease of 14 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, purchases

for resale, purchased fuels and electric energy, subcontract work, and purchased machinery from receipts and capital expenditures. It avoids the duplication in receipts which results from one establishment performing services for another. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE METAL MINING SERVICES INDUSTRIES IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958			1954			1939
		Metal mining services industries, total	Metal mining stripping services industry	Metal mining services, except stripping, industry	Metal mining services industries, total	Metal mining stripping services industry	Metal mining services, except stripping, industry	Metal mining services industries
Establishments:								
Total.....	Number.....	95	29	66	114	24	90	69
With 20 or more employees.....	.....do.....	23	6	17	26	(NA)	(NA)	(NA)
All employees:								
Number.....	Number.....	2,111	544	1,567	3,059	1,173	1,886	695
Payroll.....	Thousand dollars...	11,597	2,594	9,003	15,268	5,691	9,577	985
Production and development workers:								
Number.....	Number.....	1,973	505	1,468	2,863	1,128	1,740	637
Man-hours.....	Thousands.....	4,286	1,018	3,268	6,519	2,722	3,797	1,344
Wages.....	Thousand dollars...	10,621	2,356	8,265	13,933	5,440	8,525	853
Value added in mining services.....	.....do.....	22,909	8,459	14,450	26,703	13,071	13,632	1,822
Cost of supplies, purchased fuel and electric energy, and subcontract work....	.....do.....	9,409	1,642	7,767	12,327	7,925	4,402	546
Subcontract work only.....	.....do.....	383	(D)	(D)	509	(D)	(D)	(NA)
Cost of purchased machinery installed.....	.....do.....	1,188	989	199	2,049	1,011	1,038	(NA)
Receipts for services.....	.....do.....	32,363	10,264	22,099	38,679	20,545	18,134	2,368
Capital expenditures.....	.....do.....	1,143	826	317	2,400	1,462	938	47

D Withheld to avoid approximately disclosing data for individual companies. NA Not available. ¹Includes less than 5 employees not classified as production and development workers. ²Includes less than \$32 thousand for salaries of employees other than production and development workers.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.
Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

Receipts for services of the Metal Mining Stripping Services Industry were \$10.3 million, a decrease of 50 percent from 1954 and receipts for services of the Metal Mining Services, Except Stripping, Industry were \$22.1 million, an increase of 22 percent over 1954.

The Metal Mining Stripping Services Industry represents establishments primarily engaged in overburden stripping and strip mining for metallic ores for others on a contract, fee, or other basis. The Metal Mining Services, Except Stripping, Industry represents establishments primarily engaged in performing metal mining services, except stripping services, for others on a contract, fee, or other basis. Included are services such as mine exploration, prospect drilling, mine development, and test drilling.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Companies engaged in mining services, in general, submitted one report for all such services performed in all States. These reports were classified on the basis of the principal kind of work performed and the principal State in which the service was performed.

RECEIPTS FOR SERVICES

The receipts for services reported by establishments classified in the Metal Mining Services Industries consisted not only of services described above as primary to these industries, but also included receipts for secondary services (which are primary in other industries), and receipts for products purchased and resold without further processing at the establishment. The total receipts of establishments classified in the Metal Mining Services Industries amounted to \$32.4 million. Of this total, approximately 97 percent represented receipts for primary services.

The total receipts for services for an industry, which is the total value of receipts of

establishments classified in the industry should be clearly distinguished from the total receipts for primary services of the industry by all establishments performing services. Table 3 shows the receipts for services primary to the two service industries covered in this report as \$32.2 million. Of this total, more than 97 percent represented receipts of establishments classified in the Metal Mining Services Industries.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the performance of secondary services for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with service statistics (table 3) which show the primary services of the industries performed by all establishments, whether classified in the Metal Mining Service Industries or not.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.--GENERAL STATISTICS FOR THE METAL MINING SERVICES INDUSTRIES BY REGIONS, DIVISIONS, AND STATES: 1958 AND 1954

Region, division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining services	Cost of minerals received for prepara- tion, supplies, purchased energy, and subcontract work	Cost of pur- chased machin- ery in- stalled	Receipts for services	Capital expendi- tures	All em- ploy- ees, number	Value added in mining services
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
UNITED STATES														
Metal mining serv- ices industries, total.....	95	23	2,111	11,597	1,973	4,286	10,621	22,909	9,409	1,188	32,363	1,143	3,059	26,703
Metal mining stripping serv- ices industry....	29	6	544	2,594	505	1,018	2,356	8,459	1,642	989	10,264	826	1,173	13,071
Metal mining serv- ices, except stripping, indus- try.....	66	17	1,567	9,003	1,468	3,268	8,265	14,450	7,767	199	22,099	317	1,886	13,632
NORTHEAST														
Metal mining serv- ices industries....	4	3	266	1,413	242	511	1,251	2,041	(D)	(D)	2,863	(D)	462	3,770
NORTH CENTRAL														
Metal mining serv- ices industries, total.....	14	3	212	1,191	194	397	1,037	1,822	774	(D)	2,540	(D)	192	1,574
Metal mining stripping serv- ices industry....	3	1	72	421	63	130	356	720	235	...	955	...	192	1,574
Metal mining serv- ices, except stripping, indus- try.....	11	2	140	770	131	267	681	1,102	539	(D)	1,585	(D)		
Minnesota														
Metal mining serv- ices industries....	5	1	89	530	77	166	439	904	(D)	...	1,127	(D)	(NA)	(NA)
SOUTH														
Metal mining serv- ices industries....	9	3	354	1,598	335	735	1,486	2,315	(D)	83	4,540	(D)	274	2,237
WEST														
Metal mining serv- ices industries, total.....	68	14	1,279	7,395	1,202	2,643	6,847	16,731	5,755	946	22,420	1,012	2,131	19,122
Metal mining stripping serv- ices industry....	21	4	392	1,706	374	748	1,607	6,875	1,144	804	8,014	809	2,131	19,122
Metal mining serv- ices, except stripping, indus- try.....	47	10	887	5,689	828	1,895	5,240	9,856	4,611	142	14,406	203		
MOUNTAIN														
Metal mining serv- ices industries....	64	13	1,244	7,215	1,172	2,579	6,704	16,358	(D)	(D)	21,906	1,005	2,067	18,667
Colorado														
Metal mining serv- ices industries, total.....	24	4	303	1,665	289	632	1,568	2,644	1,169	41	3,780	74	(NA)	(NA)
Metal mining stripping serv- ices industry....	9	...	32	121	32	62	121	232	80	16	304	24	(NA)	(NA)
Metal mining serv- ices, except stripping, indus- try.....	15	4	271	1,544	257	570	1,447	2,412	1,089	25	3,476	50	(NA)	(NA)
New Mexico														
Metal mining serv- ices industries....	6	2	258	2,151	243	586	1,959	3,198	1,819	(D)	5,001	(D)	(NA)	(NA)

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

Table 2.--GENERAL STATISTICS FOR THE METAL MINING SERVICES INDUSTRIES BY REGIONS, DIVISIONS, AND STATES: 1958 AND 1954--Continued

Region, division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining services	Cost of minerals received for prepara- tion, supplies, purchased energy, and subcontract work	Cost of pur- chased machin- ery in- stalled	Receipts for services	Capital expendi- tures	All em- ploy- ees, number	Value added in mining services
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
UNITED STATES-- Continued														
Utah														
Metal mining serv- ices industries, total.....	12	3	166	899	162	356	873	2,422	663	24	3,074	35	(NA)	(NA)
Metal mining stripping serv- ices industry....	6	2	91	451	90	187	450	1,551	262	24	1,812	25	(NA)	(NA)
Metal mining serv- ices, except stripping indus- try.....	6	1	75	448	72	169	423	871	401	...	1,262	10	(NA)	(NA)
PACIFIC														
Metal mining serv- ices industries....	4	1	35	180	30	64	143	373	(D)	(D)	514	7	64	455

D Withheld to avoid approximately disclosing data for individual companies.

NA Not available.

... Represents zero.

¹For 1958, represents the metal mining services, except stripping, industry only.

Table 3. RECEIPTS FOR SERVICES PRIMARY TO THE METAL MINING SERVICES INDUSTRIES PERFORMED BY ALL INDUSTRIES IN THE UNITED STATES, BY REGIONS AND STATES: 1958 AND 1954

(Excludes receipts for services not specified by type reported by operators of metal mines or mills, amounting for 1958 to \$2,000 thousand)

Type of service, region, and State	1958	1954 ¹	Type of service, region, and State	1958	1954 ¹
UNITED STATES, total.....	32,190	37,362	West, total.....	22,255	(NA)
Stripping overburden.....	5,127	12,533	Stripping overburden and strip mining of minerals for others.....	8,014	(NA)
Strip mining of minerals for others.....	5,773	8,113	Exploration work, including geophysical and other exploratory surveying, and sinking mine shafts and driving mine tunnels.....	6,541	(NA)
Exploration work, including geophysical and other exploratory surveying.....	2,211	914	Prospect and test drilling.....	7,210	(NA)
Prospect and test drilling.....	11,440	10,363	Other drilling, including blasting and other services.....	490	(NA)
Other drilling, including blasting.....	2,621	4,725			
Sinking mine shafts and driving mine tunnels...	7,018	714	Colorado, total:	3,780	(NA)
Other services.....	(²)		Stripping overburden and strip mining of minerals for others.....	304	(NA)
East and South, total.....	9,935	(NA)	Exploration work, including geophysical and other exploratory surveying, and sinking mine shafts and driving mine tunnels.....	1,481	(NA)
Stripping overburden and strip mining of minerals for others.....	2,886	(NA)	Prospect and test drilling.....	1,648	(NA)
Exploration work, including geophysical and other exploratory surveying, and sinking mine shafts and driving mine tunnels.....	2,688	(NA)	Other drilling, including blasting and other services.....	347	(NA)
Prospect and test drilling.....	4,230	(NA)			
Other drilling, including blasting.....	131	(NA)			

NA Not available.

¹Figures for 1954 represent receipts only by establishments classified in the Metal Mining Services Industries.²Figures for receipts for other services are combined with the figure for receipts for other drilling, including blasting.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-10K-1

MERCURY ORES AND MISCELLANEOUS METAL ORES

(S.I.C. CODES 1092 AND 1099)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Mercury Ores Industry were valued at \$8.6 million, an increase of 90 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 44 percent from 1954 to 1958 to a total of 652 employees in 1958. Value added in mining in the industry amounted to \$7.1 million in 1958, an increase of 113 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased

machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.—COMPARATIVE STATISTICS FOR THE MERCURY ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929¹

Item	Unit of measure	1958	1954	1939	1929 ¹
Establishments:					
Total.....	Number.....	79	87	269	40
With 20 or more employees.....	do.....	8	5	(NA)	(NA)
All employees:					
Number.....	Number.....	652	453	702	1,117
Payroll.....	Thousand dollars..	3,110	1,972	916	1,603
Production and development workers:					
Number.....	Number.....	569	372	621	1,029
Man-hours.....	Thousands.....	1,206	841	1,421	(NA)
Wages.....	Thousand dollars..	2,627	1,607	752	1,383
Value added in mining.....	do.....	7,136	3,355	1,425	2,042
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	do.....	1,996	1,453	405	778
Cost of purchased machinery installed.....	do.....	311	226	(NA)	618
Value of shipments and receipts.....	do.....	8,592	4,519	³ 1,830	² 2,820
Capital expenditures.....	do.....	851	515	(NA)	(NA)

NA Not available.

¹Excludes 13 nonproducing establishments.

²Represents number of mines.

³Represents value of net production.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

Shipments of the Metallic Ores, N.E.C. Industry were valued at \$3.0 million, an increase of 127 percent over 1954. Average employment increased 96 percent over 1954, to a total of 231 employees and value added increased 113 percent to a total of \$1.7 million in 1958.

The Mercury Ores Industry represents establishments primarily engaged in mining, milling, or otherwise preparing mercury ores. This industry includes the production of metallic mercury by furnacing or retorting at the mine site.

The Metallic Ores, N.E.C., Industry represents establishments primarily engaged in mining, milling, or otherwise preparing miscellaneous metallic minerals (ores), not elsewhere classified, such as antimony, beryllium, palladium, tin, and other rare-earth ores.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Mercury Ores and Metallic Ores, N.E.C., Industries consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, for the Mercury Ores Industry, less than one percent of the total value of shipments represented shipments of secondary products and receipts for services. In the Metallic Ores, N.E.C., Industry, the value of shipments of secondary products amounted to between 2 and 3 percent of the total value of shipments.

The shipment of 37,138 flasks of mercury metal, valued at \$8.4 million, as shown in table 3, represents shipments of establishments classified in the Mercury Ores Industry. No shipments of mercury metal were made by establishments classified in other industries. The figures for shipments of beryllium concentrates

represent shipments by establishments classified in the Metallic Ores, N.E.C., Industry as well as establishments classified in other industries. This same situation obtains for the shipments of zirconium concentrates. For crude thorium ores, the figures represent shipments of establishments classified only in the Metallic Ores, N.E.C., Industry. No other shipments of crude thorium ores were reported.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1B.—COMPARATIVE STATISTICS FOR THE METALLIC ORES, N.E.C., INDUSTRY IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958	1954
Establishments:			
Total.....	Number.....	62	47
With 20 or more employees.....	...do.....	2	2
All employees:			
Number.....	Number.....	231	118
Payroll.....	Thousand dollars..	1,043	447
Production and development workers:			
Number.....	Number.....	180	98
Man-hours.....	Thousands.....	375	207
Wages.....	Thousand dollars..	776	338
Value added in mining.....	...do.....	1,692	794
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	1,479	860
Cost of purchased machinery installed.....	...do.....	360	748
Value of shipments and receipts.....	...do.....	3,005	1,325
Capital expenditures.....	...do.....	526	1,077

Table 2.—GENERAL STATISTICS FOR THE MERCURY ORES AND THE METALLIC ORES, N.E.C., INDUSTRIES BY REGIONS OR DIVISIONS, AND STATES: 1958 AND 1954

Region or division and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
MERCURY ORES INDUSTRY														
United States, total.....	79	8	652	3,110	569	1,206	2,627	7,136	1,996	311	8,592	851	453	3,355
West South Central and Mountain.....	26	3	184	875	166	347	788	2,579	616	25	2,973	247	132	1,186
Nevada.....	16	2	137	656	126	264	611	1,877	357	18	2,119	133	(NA)	(NA)
Pacific.....	53	5	468	2,235	403	859	1,839	4,557	1,380	286	5,619	604	321	2,169
California.....	41	4	383	1,819	329	700	1,490	3,913	1,081	149	4,972	171	295	2,067
METALLIC ORES, N.E.C., INDUSTRY														
United States, total.....	62	2	231	1,043	180	375	776	1,692	1,479	360	3,005	526	118	794
East and South.....	22	1	67	256	36	124	95	361	340	138	659	180	39	328
South Dakota.....	16	...	9	21	8	16	20	82	20	3	94	11	11	114
West.....	40	1	164	787	144	251	681	1,331	1,139	222	2,346	346	79	466

NA Not available.

... Represents zero.

1958 CENSUS OF MINERAL INDUSTRIES

Table 3.—PRIMARY PRODUCTS OF THE MERCURY ORES AND METALLIC ORES, N.E.C., INDUSTRIES PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES, BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954

Product, region or division, and State	Unit of measure for quantity	1958				1954			
		Production	Shipments including interplant transfers		Minerals produced and prepared at same establish- ment	Production	Shipments including interplant transfers		Minerals produced and prepared at same establish- ment
			Quantity	Value (\$1,000)			Quantity	Value (\$1,000)	
Mercury ore and metal:									
United States, total:									
Crude ore.....	Short tons.....	399,873	(D)	(D)	336,793	175,393	(D)	(D)	¹ 173,027
Mercury metal.....	Flasks (76 pounds)....	33,712	37,138	8,389	xxx	17,487	18,995	² 4,519	xxx
West South Central and Mountain:									
Crude ore.....	Short tons.....	192,102	(D)	(D)	130,839	(NA)	(NA)	(NA)	43,529
Mercury metal.....	Flasks (76 pounds)....	9,835	12,745	2,841	xxx	(NA)	(NA)	(NA)	xxx
Pacific:									
Crude ore.....	Short tons.....	207,771	(D)	(D)	205,954	(NA)	(NA)	(NA)	¹ 129,498
Mercury metal.....	Flasks (76 pounds)....	23,877	24,393	5,548	xxx	(NA)	(NA)	(NA)	xxx
California:									
Crude ore.....	Short tons.....	155,388	(D)	(D)	153,571	123,197	(D)	(D)	(NA)
Mercury metal.....	Flasks (76 pounds)....	21,334	21,506	4,901	xxx	11,260	11,337	² 2,987	xxx
Beryllium concentrates.....	Short tons.....	449	449	210	(³)	⁴ 550	⁴ 650	⁴ 320	(NA)
Thorite (crude).....	Short tons.....	661	661	33	...	(NA)	(NA)	(NA)	(NA)
Zirconium concentrates.....	Short tons.....	35,205	39,377	1,623	xxx	20,000	20,000	1,029	(D)

D Withheld to avoid approximately disclosing data for individual companies.

NA Not available.

xxx Not applicable.

¹Includes a small quantity of ore received from other establishments for preparation, amounting to less than two percent of the total for the United States.²Includes the value of a small quantity of crude mercury ore shipped to other mineral establishments for preparation, amounting to less than 0.1 percent of the total for the United States.³Probably all beryl reported as produced and shipped is hand-cobbed, with waste removed.⁴Represents an estimate on the basis of information reported on receipts of beryllium ores at mills.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC(P)-10K-2 (Rev.)

TITANIUM ORES

(S.I.C. CODE 1093)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Titanium Ores Industry were valued at \$17.2 million; an increase of 35 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 14 percent from 1954 to 1958 to a total of 958 employees in 1958. Value added in mining in the industry amounted to \$14.5 million in 1958, an increase of 30 percent from 1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of

shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

NOTE ON REVISION: This revision is issued to correct the units of measure shown in the column headings in table 3. The figures, as originally reported, remain unchanged.

Table 1.--GENERAL STATISTICS FOR THE TITANIUM ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of quantity	1958	1954	1939
Establishments:				
Total.....	Number.....	11	10	3
With 20 or more employees.....	..do.....	7	6	(NA)
All employees:				
Number.....	..do.....	958	843	196
Payroll.....	Thousand dollars	4,421	3,699	182
Production and development workers:				
Number.....	Number.....	706	568	183
Man-hours.....	Thousands.....	1,234	1,261	322
Wages.....	Thousand dollars	2,881	2,397	140
Value added in mining.....	..do.....	14,458	11,134	370
Cost of supplies, minerals received for preparation, fuel, purchased electricity, and contract work.....	..do.....	5,052	4,328	88
Cost of purchased machinery installed.....	..do.....	131	1,286	(NA)
Value of shipments and receipts.....	..do.....	17,158	12,750	458
Capital expenditures.....	..do.....	2,483	3,998	(NA)

NA Not available.

¹Represents value of net production.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

The Titanium Ores Industry represents establishments engaged primarily in mining, milling, or otherwise preparing titanium ores. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

This report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Titanium Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary to other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Titanium Ores Industry amounted to \$17.2 million. Of this total, \$12.3 million were products primary to the industry.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be distinguished from the total value of primary products of the industry shipped by all producers. The latter figure appearing in table 3 indicates that \$12.4 million of ilmenite and rutile concentrates were shipped by all producers of such products. As indicated above, of this total, \$12.3 million or 99 percent were shipped by establishments classified in the Titanium Ores Industry while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net"

shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

More detailed figures for this industry will appear later in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Also, in this report, there will be a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. (Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.).

BACKGROUND

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The canvass included the continental United States, Alaska, and Hawaii. The figures in this report include the results for establishments located in the continental United States. Alaska and Hawaii were not States until 1959 and will be covered in separate reports.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight. Thus, the next Census will be conducted in 1964 covering mining activity in 1963.

Table 2.--GENERAL STATISTICS FOR THE TITANIUM ORES INDUSTRY, BY GEOGRAPHIC DIVISION AND STATES: 1958 AND 1954

(In order to avoid approximate disclosure of individual company figures, statistics by Geographic Divisions and States are not published.)

Table 3.--PRIMARY PRODUCTS OF THE TITANIUM ORES INDUSTRY IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Item	1958			1954		
	Production (Short tons)	Total shipments including interplant transfers		Production (Short tons)	Total shipments including interplant transfers	
		Quantity (Short tons)	Value (\$1,000)		Quantity (Short tons)	Value (\$1,000)
Crude ores mined.....	¹ 13,244	xxx	xxx	(NA)	xxx	xxx
Titanium concentrates, total.....	605,522	597,523	12,365	557,276	541,519	² 8,647
Ilmenite concentrates.....	595,265	591,464	11,590	547,981	531,924	² 7,455
Rutile concentrates.....	10,257	6,059	775	9,295	9,595	1,192

NA Not available.

¹Represents crude ores as mined in the Titanium Ores Industry only, *in thousands*.²Includes the value of a small quantity of titanium ore shipped for concentration, amounting to less than 1 percent of the total value of titanium concentrates shipped.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC(P)-10K-3

URANIUM-RADIUM-VANADIUM ORES

(S.I.C. CODE 1094)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Uranium-Radium-Vanadium Ores Industry were valued at \$336 million, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Value of shipment figures for this industry were not obtained in the 1954 Census of Mineral Industries. Average employment in this industry showed an increase of 129 percent from 1954 to 1958 to a total of nearly 8 thousand employees in 1958. Value added in mining in the industry amounted to \$179 million in 1958. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric

energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE URANIUM-RADIUM-VANADIUM ORES INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	590	637	18
With 20 or more employees.....	...do.....	60	26	(NA)
All employees:				
Number.....	Number.....	7,949	3,467	441
Payroll.....	Thousand dollars	44,422	14,568	609
Production and development workers:				
Number.....	Number.....	6,394	2,944	378
Man-hours.....	Thousands.....	13,942	6,227	879
Wages.....	Thousand dollars	34,432	11,908	497
Value added in mining.....	...do.....	178,606	(NA)	1,043
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	239,317	² 20,074	² 429
Minerals received for preparation only.....	...do.....	109,452	(NA)	(NA)
Contract work only.....	...do.....	54,597	7,462	45
Cost of purchased machinery installed.....	...do.....	19,555	5,336	(NA)
Value of shipments and receipts.....	...do.....	336,334	(NA)	(NA)
Value of net shipments and receipts.....	...do.....	226,882	(NA)	³ 1,472
Capital expenditures.....	...do.....	101,144	14,793	(NA)

NA Not available.

¹Represents number of mines.²Excludes cost of minerals received for preparation.³Represents value of products.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Uranium-Radium-Vanadium Ores Industry represents establishments engaged primarily in mining, milling, or otherwise preparing uranium-radium-vanadium ores. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Uranium-Radium-Vanadium Ores Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Uranium-Radium-Vanadium Ores Industry amounted to \$336.3 million dollars. Of this total, \$334.4 million were products primary to the industry and \$1.9 million were products primary to other industries. No uranium-vanadium ores or concentrates were produced in other industries in 1958.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of

crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of gross shipments for the Uranium-Radium-Vanadium Ores Industry in 1958 was \$336 million and the value of net shipments, \$227 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.—GENERAL STATISTICS FOR THE URANIUM-RADIUM-VANADIUM ORES INDUSTRY BY DIVISIONS AND STATES: 1958 AND 1954

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	590	60	7,949	44,422	6,394	13,942	34,432	178,606	239,317	19,555	336,334	101,144	3,467	(NA)
East and South.....	26	2	158	916	126	288	705	2,650	3,960	462	6,311	761	101	(NA)
South Dakota.....	15	1	112	586	96	217	479	2,005	3,843	447	5,767	528	37	(NA)
Mountain.....	536	56	7,594	42,437	6,107	13,306	32,890	170,784	229,732	18,821	323,470	95,867	3,337	}
Wyoming.....	62	2	591	3,352	465	1,053	2,642	21,859	20,084	404	32,840	9,507	13	
Colorado.....	226	21	2,486	12,513	1,977	4,168	9,651	28,494	64,502	11,256	87,350	16,902	1,631	
New Mexico.....	49	11	2,180	13,782	1,797	4,193	10,771	62,893	74,716	4,619	77,394	64,834	421	
Arizona.....	33	6	508	2,220	474	983	2,007	7,828	5,488	282	12,691	907	340	
Utah.....	153	16	1,781	10,331	1,365	2,851	7,683	49,681	64,864	2,258	113,141	3,662	881	
Pacific.....	28	2	197	1,069	161	348	837	5,172	5,625	272	6,553	4,516	29	(NA)
Washington.....	12	1	107	502	82	178	378	3,640	2,914	24	6,493	85	(D)	(NA)

NA Not available.

D Withheld to avoid approximately disclosing data for individual companies.

Table 3.—PRIMARY PRODUCTS OF THE URANIUM-RADIUM-VANADIUM ORES INDUSTRY IN THE UNITED STATES, BY DIVISIONS AND STATES: 1958¹

Product by Division and State	Production (1,000 short tons)	Shipments including interplant transfers		Minerals prepared		
		Quantity (1,000 short tons)	Value (\$1,000)	Mined and prepared at same establishment (1,000 short tons)	Received from other establishments for preparation	
					Quantity (1,000 short tons)	Value (\$1,000)
United States, total:						
Crude ore.....	5,446.2	3,602.1	92,047	1,533.9	4,432.5	109,452
Concentrates ²	58.4	58.5	242,360	xxx	xxx	xxx
East and South:						
Crude ore.....	53.0	53.0	1,100	...	(D)	(D)
South Dakota:						
Crude ore.....	36.6	36.6	556	...	(D)	(D)
Mountain:						
Crude ore.....	5,222.2	3,534.4	90,581	(D)	(D)	(D)
Wyoming:						
Crude ore.....	618.0	546.4	10,355	(D)	(D)	(D)
Colorado:						
Crude ore.....	820.4	793.8	18,903	...	1,423.1	31,413
Concentrates ²	30.1	30.8	68,348	xxx	xxx	xxx
New Mexico:						
Crude ore.....	2,196.2	705.3	9,952	1,310.3	687.0	14,903
Concentrates.....	4.6	4.5	67,200	xxx	xxx	xxx
Arizona:						
Crude ore.....	223.0	223.9	6,864	...	(D)	(D)
Utah:						
Crude ore.....	1,360.9	1,261.2	44,453	...	1,344.1	44,930
Concentrates.....	21.4	21.0	67,103	xxx	xxx	xxx
Pacific:						
Crude ore.....	171.0	14.7	366	(D)	(D)	(D)
Washington:						
Crude ore.....	153.3	11.7	306	(D)	(D)	(D)

D Withheld to avoid approximately disclosing data for individual companies.

xxx Not applicable.

¹Primary product figures for this industry are not available from the 1954 Census of Mineral Industries.²Includes low-grade concentrates shipped to mill for upgrading.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF COMMERCE

GROUP 11

GROUP 12

GROUP 13

GROUP 14

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC(P)-11B-1

ANTHRACITE

(S.I.C. CODE 1111)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Anthracite Industry were valued at \$289 million, a decrease of 21 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 40 percent from 1954 to 1958 to a total of 20 thousand employees in 1958. Value added in mining in the industry amounted to \$139 million in 1958, a decrease of 17 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1--GENERAL STATISTICS FOR THE ANTHRACITE INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	1,167	1,291	¹ 518	198
With 20 or more employees.....	...do.....	118	186	(NA)	² 147
All employees:					
Number.....	Number.....	19,649	32,769	85,713	151,171
Payroll.....	Thousand dollars	79,098	118,070	115,860	251,249
Production and development workers:					
Number.....	Number.....	17,269	28,823	80,429	142,801
Man-hours.....	Thousands.....	26,481	42,061	120,085	(NA)
Wages.....	Thousand dollars	67,422	98,678	104,378	229,967
Value added in mining.....	...do.....	138,735	167,090	146,418	320,756
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	156,857	200,663	43,230	64,098
Minerals received for preparation only.....	...do.....	82,743	119,848	(NA)	(NA)
Contract work only.....	...do.....	42,277	50,156	11,029	6,802
Cost of purchased machinery installed.....	...do.....	6,282	5,667	(NA)	5,580
Value of shipments and receipts.....	...do.....	289,131	365,536	(NA)	(NA)
Value of net shipments and receipts.....	...do.....	208,009	248,513	189,648	384,854
Capital expenditures.....	...do.....	12,743	7,884	(NA)	(NA)

NA Not available.

¹Represents number of mines, culm banks, and dredges.²Represents the number of establishments with 21 or more production and development workers.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of 45 preliminary Census of Mineral reports, \$4.00

The Anthracite Industry represents establishments engaged primarily in producing anthracite, or in developing anthracite mines. All establishments in the United States classified in this industry are in Pennsylvania. This industry includes underground mines, stripping or culm bank operations by owners, dredge operations, and coal preparation plants (breakers, washeries, and screening plants) whether or not operated in conjunction with the mines served. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Anthracite Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Anthracite Industry amounted to \$289 million. Of this total, \$282 million were products primary to the industry and \$7 million were receipts for contract services and for products purchased and resold without further processing. There was no anthracite produced by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is

significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. Net shipments of the Anthracite Industry in 1958 amounted to \$208 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (table 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

Table 2.--GENERAL STATISTICS FOR THE ANTHRACITE INDUSTRY BY GEOGRAPHIC DIVISIONS AND STATES: 1958 AND 1954

(Not applicable to this industry since all establishments are located in Pennsylvania)

Table 3.--PRIMARY PRODUCTS OF THE ANTHRACITE INDUSTRY: 1958 AND 1954

Product	1953			1954		
	Production for use at same establishments (1,000 short tons)	Total shipments including interplant transfers		Production for use at same establishments (1,000 short tons)	Total shipments including interplant transfers	
		Quantity (1 000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
Raw coal:						
Shipped for use without preparation.....	xxx	1,775	6,985	xxx	124	156
Used for power or heat.....	47	xxx	xxx	34	xxx	xxx
For preparation.....	14,597	19,420	81,122	21,367	24,177	117,023
Prepared coal:						
Mechanically cleaned.....	(NA)	19,604	180,811	(NA)	28,571	246,120
Other preparation.....	(NA)	1,622	13,325	(NA)		
Used for power or heat.....	152	xxx	xxx	561	xxx	xxx

NA Not available.
xxx Not applicable.

USCOMM--DC

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

January 1960

MIC(P)-11B-2

ANTHRACITE CONTRACT SERVICES

(S.I.C. CODES 1112 AND 1113)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts for services of the Anthracite Stripping Services Industry were \$34.5 million, a decrease of 18 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. The Anthracite Mining Services, Except Stripping, Industry showed total receipts for services of \$0.3 million, a decrease of 62 percent from 1954. Average employment in these industries showed a decrease of 34 percent from 1954 to 1958 to a total of 3,107 employees in 1958. Value added in mining in these industries amounted to \$22.8 million in 1958, a decrease of 23 percent from 1954. Value added is derived by subtracting the cost of supplies, purchased fuels

and electric energy, subcontract work, and purchased machinery from receipts for services and capital expenditures. It avoids the duplication in value of shipments which results from the use of services and products of some establishments or by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.--COMPARATIVE STATISTICS FOR THE ANTHRACITE STRIPPING SERVICES INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1959

Item	Unit of measure	1958	1954	1959
Establishments:				
Total.....	Number.....	80	132	¹ 58
With 20 or more employees.....	..do.....	42	56	(NA)
All employees:				
Number.....	..do.....	3,060	4,556	2,646
Payroll.....	Thousand dollars	13,740	17,380	3,915
Production and development workers:				
Number.....	Number.....	2,743	4,074	2,461
Man-hours.....	Thousands.....	4,414	6,038	4,038
Wages.....	Thousand dollars	11,803	14,809	3,166
Value added in mining.....	..do.....	22,539	29,079	7,126
Cost of supplies, purchased fuel and electric energy, and subcontract work...	..do.....	12,384	11,977	3,810
Subcontract work only.....	..do.....	1,186	1,068	141
Cost of purchased machinery installed.....	..do.....	3,269	3,529	(NA)
Receipts for services.....	..do.....	34,461	42,048	10,936
Capital expenditures.....	..do.....	3,731	2,537	1,000

NA Not available.

¹Represents number of operating companies.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.
Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00

The Anthracite Stripping Services Industry represents establishments engaged primarily in overburden stripping and strip-mining for fresh or culm-bank anthracite for others on a contract, fee, or other basis.

The Anthracite Mining Services, Except Strip Mining, Industry represents establishments engaged primarily in performing anthracite mining services, except stripping services, for others on a contract, fee, or other basis. Included are services such as drilling, mine tunnelling, shaft sinking, and pumping, or draining mines.

This report includes figures for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of Industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

RECEIPTS FOR SERVICES

The receipts for services reported by establishments classified in the Anthracite Contract Services Industries consisted not only of services described above as primary to the industry, but also included the value of secondary services, such as hauling, which are primary in other industries. The total receipts of establishments classified in the Anthracite Stripping Services Industries amounted to \$34.8 million. Of this total, \$34.3 million were services primary to this industry, and \$0.5 million were services primary to other industries, primarily hauling minerals and mine equipment beyond the mine property.

The total value of receipts for these Anthracite Contract Services Industries which is the total value of receipts of establishments classified in these industries should be clearly distinguished from the total value of primary services of the industries by all contractors. The detail by type of service appearing in table 3, includes only receipts for such services by the 2 specified industries, and similar detail is not available for such services performed by establishments classified in other industries. However, preliminary Census tabulations indicate that establishments classified in the Anthracite Industry performed such services valued at about \$1.4 million in 1958 in addition to the receipts of \$33.9 for such services shown in table 3.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the performance of secondary contract work for others.

PUBLICATION PROGRAM

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," and "secondary production," as well as the various statistical items such as "employment," and "value added," etc. Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 1B.--COMPARATIVE STATISTICS FOR THE ANTHRACITE MINING SERVICES, EXCEPT STRIPPING, INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Totals.....	Number.....	6	13	¹ 13
With 20 or more employees.....	...do.....	...	3	(NA)
All employees:				
Number.....	...do.....	47	137	233
Payroll.....	Thousand dollars	206	479	275
Production and development workers:				
Number.....	Number.....	44	129	222
Man-hours.....	Thousands.....	64	167	339
Wages.....	Thousand dollars	196	445	254
Value added in mining.....	...do.....	266	666	479
Cost of supplies, purchased fuel and electric energy, and subcontract work...	...do.....	57	180	63
Subcontract work only.....	...do.....	...	2	(NA)
Cost of purchased machinery installed.....	...do.....	99	74	(NA)
Receipts for services.....	...do.....	323	847	542
Capital expenditures.....	...do.....	100	73	9

NA Not available.

¹Represents number of operating companies.

Table 2.--GENERAL STATISTICS FOR THE ANTHRACITE CONTRACT SERVICES INDUSTRIES, BY GEOGRAPHIC DIVISION AND STATE: 1958 AND 1954

(Not applicable to these industries since all operations are located in Pennsylvania.)

Table 3.--RAW ANTHRACITE MINED AND RECEIPTS FOR PRIMARY SERVICES PERFORMED, BY TYPE OF SERVICE, FOR THE ANTHRACITE CONTRACT SERVICES INDUSTRIES: 1958 AND 1954

Type of service	1958		1954	
	Raw coal mined and culm-bank material loaded (1,000 short tons)	Receipts for services performed (\$1,000)	Raw coal mined and culm-bank material loaded (1,000 short tons)	Receipts for services performed (\$1,000)
Anthracite stripping services, total.....	11,432	33,305	16,456	¹ 42,048
Stripping overburden and strip mining anthracite not for own account.....	8,627	30,967	11,328	¹ 38,442
Recovering culm bank coal.....	2,805	2,338	5,128	3,606
Anthracite services other than stripping, total.....	xxx	926	xxx	2847
Sinking mine shafts and driving mine tunnels.....	xxx	217	xxx	2574
Prospect, test, and other drilling (including blasting).....	xxx	55	xxx	2273
Exploration work, including geophysical and other exploratory surveying, and other anthracite services, n.e.c.....	xxx	654	xxx	

¹Includes receipts for other services by the Anthracite Stripping Services Industry, amounting to less than one percent of the total.²Receipts for secondary services for the Anthracite Stripping Services Industry are included with receipts for overburden stripping and strip mining services.

xxx Not applicable.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D. C.

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1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

June 1960

MIC(P)-12A-1

BITUMINOUS COAL AND LIGNITE

(S.I.C. Codes 1211 and 1212)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Bituminous Coal Industry were valued at \$2,395 million, an increase of 17 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 14 percent from 1954 to 1958 to a total of 186 thousand employees in 1958. Value added in mining in the industry amounted to \$1,580 million in 1958, an increase of 13 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

During 1958, shipments of the Lignite Industry were valued at \$11.0 million, an increase of 6 percent over 1954. Average employment in this industry showed a decrease of 11 percent from 1954 to 1958 to a total of 510 employees in 1958. Value added in mining in the industry amounted to \$9.3 million in 1958, an increase of 2 percent from 1954.

The Bituminous Coal Industry represents establishments engaged primarily in producing bituminous coal or in developing bituminous coal mines. This industry includes underground mining, auger mining, strip mining, and coal cleaning, crushing, screening, and sizing plants whether or not operated in conjunction with the mines served.

The Lignite Industry represents establishments engaged primarily in producing lignite or in developing lignite mines.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of the approximately 36,300 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Bituminous Coal and Lignite Industries consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Bituminous Coal Industry amounted to \$2,395 million. Of this total, \$2,355 million were products primary to the industry and \$40 million were products primary to other industries, receipts for contract services, and coal purchased and resold without further processing.

The total value of shipments for an industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures, appearing in table 3, indicates that over 99 percent of all bituminous coal was shipped by the Bituminous Coal Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude

minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of gross shipments and receipts for the Bituminous Coal Industry in 1958 was \$2,395 million and the value of net shipments and receipts was \$2,104 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports are being issued for other industries. Summaries of preliminary United States totals for each mining industry and totals for each State have also been issued recently. Final industry reports and final State reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1A.—GENERAL STATISTICS FOR THE BITUMINOUS COAL INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929 ¹
Establishments:					
Total.....	Number.....	6,726	6,643	² 5,716	⁴ 4,995
With 20 or more employees.....	...do.....	1,351	1,434	(NA)	³ 2,483
All employees:					
Number.....	Number.....	185,952	216,813	388,955	482,521
Payroll.....	Thousand dollars..	903,927	865,649	474,747	633,566
Production and development workers:					
Number.....	Number.....	163,169	197,819	369,265	458,835
Man-hours.....	Thousand.....	265,760	322,410	542,310	(NA)
Wages.....	Thousand dollars..	753,641	757,175	430,564	574,919
Value added in mining.....	...do.....	1,579,873	1,396,774	607,318	819,976
Cost of supplies, coal received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	840,866	640,706	⁴ 120,040	⁴ 146,718
Coal received for preparation only.....	...do.....	320,068	203,953	(NA)	(NA)
Contract work only.....	...do.....	70,909	54,231	1,899	1,890
Cost of purchased machinery installed.....	...do.....	135,080	118,481	(NA)	34,947
Value of shipments and receipts.....	...do.....	2,394,535	2,040,200	(NA)	(NA)
Value of net shipments and receipts.....	...do.....	2,103,758	1,778,336	727,358	966,694
Capital expenditures.....	...do.....	161,284	119,761	(NA)	(NA)

NA Not available.

¹Includes figures for the Lignite Industry.²Represents number of mines.³Represents establishments with 21 or more production and related workers.⁴Excludes cost of coal received for preparation.

Table 1B.—GENERAL STATISTICS FOR THE LIGNITE INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	58	60	¹ 131
With 20 or more employees.....	...do.....	8	9	(NA)
All employees:				
Number.....	Number.....	510	574	1,595
Payroll.....	Thousand dollars	2,693	2,588	1,603
Production and development workers:				
Number.....	Number.....	437	505	1,480
Man-hours.....	Thousand.....	844	901	3,027
Wages.....	Thousand dollars	2,261	2,177	1,384
Value added in mining.....	...do.....	9,307	9,093	2,879
Cost of supplies, coal received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	1,636	1,326	578
Contract work only.....	...do.....	34	206	11
Cost of purchased machinery installed.....	...do.....	1,522	607	(NA)
Value of shipments and receipts.....	...do.....	11,033	10,387	3,457
Capital expenditures.....	...do.....	1,432	639	(NA)

NA Not available.

¹Represents number of mines.

Table 2.--GENERAL STATISTICS FOR THE BITUMINOUS COAL AND LIGNITE INDUSTRIES, BY DIVISION AND STATE: 1958 AND 1954

Industry, division, and State	1958												1954	
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of coal received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
BITUMINOUS COAL														
United States, total.....	6,726	1,351	1185,952	1,903,927	163,169	265,760	753,741	1,579,873	840,866	135,080	2,394,535	161,284	216,813	1,396,774
Middle Atlantic (Pennsylvania).....	1,309	230	236,676	2182,018	31,725	51,518	147,870	288,293	161,025	30,803	448,923	31,198	50,497	294,970
East North Central, total.....	610	200	25,109	142,542	21,480	38,214	116,091	283,813	130,323	23,942	411,746	26,332	30,832	258,913
Ohio.....	381	96	39,906	353,301	8,241	14,472	41,232	99,722	67,165	9,504	164,344	12,047	11,132	90,164
Indiana.....	89	34	4,113	22,861	3,415	5,753	18,245	45,279	15,125	2,337	61,037	1,704	4,744	39,588
Illinois.....	140	70	11,090	66,380	9,824	17,989	56,614	138,812	48,033	12,101	186,365	12,581	14,956	129,161
West North Central, total.....	132	18	1,949	9,951	1,252	2,329	5,848	16,195	4,888	3,582	20,530	4,135	1,949	15,471
Iowa.....	63	5	500	1,714	472	909	1,589	3,950	1,455	561	5,324	3,904	602	3,556
Missouri.....	50	10	1,197	6,730	576	1,105	3,171	9,615	2,702	2,806	11,861	3,904	850	7,644
Kansas.....	19	3	252	1,507	204	315	1,088	2,630	731	215	3,345	231	497	4,271
South Atlantic, total.....	2,664	540	76,379	365,163	68,183	109,142	310,428	629,994	332,215	46,693	942,963	65,939	79,156	494,259
Maryland.....	77	5	539	1,845	502	867	1,724	2,812	2,063	706	5,134	447	371	1,631
Virginia.....	869	128	14,076	55,230	12,315	19,690	46,989	90,546	69,127	5,578	155,947	9,304	11,720	61,508
West Virginia.....	1,713	407	61,748	308,053	55,350	88,565	261,680	536,590	261,018	40,406	781,829	56,185	67,056	431,087
Georgia.....	5	...	16	35	16	20	35	46	7	3	53	3	9	33
East South Central, total.....	1,733	297	38,536	166,706	34,346	54,337	143,280	301,337	175,515	24,400	476,387	24,865	44,608	268,259
Kentucky.....	1,307	230	28,386	121,598	25,313	40,461	105,920	225,407	136,782	18,476	361,930	18,735	31,787	193,094
Tennessee.....	277	27	2,697	9,697	2,403	3,588	8,510	16,955	12,899	1,638	29,352	2,140	4,133	20,837
Alabama.....	148	40	7,453	35,411	6,630	10,288	28,850	58,975	25,834	4,286	85,105	3,990	8,688	54,328
West South Central, total.....	61	14	1,072	5,556	993	1,820	5,077	10,732	4,108	467	14,413	894	1,622	11,637
Arkansas.....	29	4	252	1,219	234	394	1,124	2,077	1,119	90	3,086	200	457	2,783
Oklahoma.....	32	10	820	4,337	759	1,426	3,953	8,655	2,989	377	11,327	694	1,165	8,854
Mountain, total.....	204	47	5,667	28,427	4,945	7,806	23,945	47,924	31,817	5,129	77,038	7,832	7,449	49,936
Montana.....	19	2	146	687	129	212	600	805	341	24	1,147	23	338	2,906
Wyoming.....	20	6	506	1,991	399	489	1,512	4,222	1,508	223	5,619	334	1,222	8,857
Colorado.....	105	21	2,016	9,627	1,799	2,823	8,358	16,304	3,822	881	19,698	1,309	2,618	13,480
New Mexico.....	22	1	156	588	133	231	515	1,176	292	590	783	1,275	159	614
Utah.....	35	17	2,825	15,506	2,467	4,029	12,932	25,371	25,846	3,411	49,737	4,891	3,091	24,020
Idaho and Arizona.....	3	...	18	28	18	22	28	46	8	...	54	...	21	59
Pacific (Washington)	13	5	276	1,360	245	594	1,202	1,585	975	64	2,535	89	4,700	43,329
LIGNITE														
United States, total.....	58	8	510	2,693	437	844	2,261	9,307	1,636	1,522	11,033	1,432	574	9,093
East and South.....	46	8	483	2,596	412	801	2,171	9,111	1,556	1,320	10,758	1,229	557	8,986
Mountain (Montana)...	12	...	27	97	25	43	90	196	80	202	275	203	517	5107

¹Includes data for office employees in Massachusetts.²Includes data for office employees in New York.³Includes data for office employees in Michigan.⁴Includes data for 1 establishment in Oregon.⁵Includes data for 1 establishment in California.

Table 3.--PRIMARY PRODUCTS OF THE BITUMINOUS COAL AND LIGNITE INDUSTRIES, BY DIVISION AND STATE: 1958 AND 1954

Product, division, and State	1958			1954		
	Production for use at same establishment (1,000 short tons)	Total shipments including interplant transfers		Production for use at same establishment (1,000 short tons)	Total shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
BITUMINOUS COAL						
UNITED STATES						
Raw coal:						
Shipped for use without preparation.....	xxx	62,832	256,512	xxx	¹ 162,803	¹ 696,142
Used for power or heat.....	76	xxx	xxx	(²)	xxx	xxx
For preparation ³	342,833	71,871	290,773	221,472	55,492	199,799
Prepared coal:						
Mechanically cleaned ⁴	(NA)	258,595	1,342,131	(NA)	224,516	1,065,040
Other preparation only ⁵	(NA)	99,842	465,958	(NA)	(¹)	(¹)
Used for power or heat.....	284	xxx	xxx	² 754	xxx	xxx
MIDDLE ATLANTIC (Pennsylvania)						
Raw coal:						
Shipped for use without preparation.....	xxx	13,241	57,138	xxx	¹ 33,405	¹ 152,195
Used for power or heat.....	19	xxx	xxx	(²)	xxx	xxx
For preparation ³	51,132	15,291	64,257	34,328	14,854	55,909
Prepared coal:						
Mechanically cleaned ⁴	(NA)	39,634	246,643	(NA)	38,345	227,038
Other preparation only ⁵	(NA)	16,501	73,812	(NA)	(¹)	(¹)
Used for power or heat.....	32	xxx	xxx	² 204	xxx	xxx
EAST NORTH CENTRAL						
Raw coal:						
Shipped for use without preparation.....	xxx	10,249	37,293	xxx	¹ 28,364	¹ 98,484
Used for power or heat.....	3	xxx	xxx	(²)	xxx	xxx
For preparation ³	84,472	10,990	34,284	59,919	12,354	32,408
Prepared coal:						
Mechanically cleaned ⁴	(NA)	65,014	263,507	(NA)	62,169	246,230
Other preparation only ⁵	(NA)	18,074	70,216	(NA)	(¹)	(¹)
Used for power or heat.....	88	xxx	xxx	² 143	xxx	xxx
Ohio						
Raw coal:						
Shipped for use without preparation.....	xxx	6,763	24,499	xxx	¹ 18,744	¹ 63,622
For preparation ³	22,851	6,800	22,310	14,087	3,334	9,397
Prepared coal:						
Mechanically cleaned ⁴	(NA)	14,477	62,925	(NA)	13,833	55,263
Other preparation only ⁵	(NA)	12,790	48,809	(NA)	(¹)	(¹)
Indiana						
Raw coal:						
Shipped for use without preparation.....	xxx	2,646	9,373	xxx	¹ 2,637	¹ 10,149
For preparation ³	⁶ 14,142	(⁷)	(⁷)	11,198	1,354	3,205
Prepared coal:						
Mechanically cleaned ⁴	(NA)	10,532	40,667	(NA)	13,418	55,667
Other preparation only ⁵	(NA)	1,886	8,099	(NA)	(¹)	(¹)
Illinois						
Raw coal:						
Shipped for use without preparation.....	xxx	840	3,421	xxx	¹ 6,983	¹ 24,713
For preparation ³	⁶ 51,669	74,190	711,974	34,634	7,666	19,806
Prepared coal:						
Mechanically cleaned ⁴	(NA)	40,005	159,915	(NA)	34,918	135,300
Other preparation only ⁵	(NA)	3,398	13,308	(NA)	(¹)	(¹)
WEST NORTH CENTRAL						
Raw coal:						
Shipped for use without preparation.....	xxx	514	2,140	xxx	¹ 1,564	¹ 6,282
Used for power or heat.....	(⁸)	xxx	xxx	(²)	xxx	xxx
For preparation ³	4,605	373	1,137	3,609	1,182	3,242
Prepared coal:						
Mechanically cleaned ⁴	(NA)	2,566	11,204	(NA)	3,529	13,787
Other preparation only ⁵	(NA)	1,569	5,792	(NA)	(¹)	(¹)
Used for power or heat.....	(⁸)	xxx	xxx	² 3	xxx	xxx
See footnotes at end of table.						

See footnotes at end of table.

Table 3.--PRIMARY PRODUCTS OF THE BITUMINOUS COAL AND LIGNITE INDUSTRIES, BY DIVISION AND STATE: 1958 AND 1954--Continued

Product, division, and State	1958			1954		
	Production for use at same establishment	Total shipments including interplant transfers		Production for use at same establishment	Total shipments including interplant transfers	
		Quantity	Value		Quantity	Value
		(1,000 short tons)	(1,000 short tons) (\$1,000)		(1,000 short tons)	(1,000 short tons) (\$1,000)
WEST NORTH CENTRAL--Continued						
Iowa						
Raw coal:						
Shipped for use without preparation.....	xxx	392	1,551	xxx	1,198	1,94,509
For preparation ³	6955	(⁶)	(D)	...	...	...
Prepared coal:						
Other preparation only ⁵	(NA)	966	3,350	(NA)	(¹)	(¹)
Missouri and Kansas						
Raw coal:						
Shipped for use without preparation.....	xxx	122	589	xxx	1366	1,778
For preparation ³	64,023	(⁶)	(D)	(D)	1,182	3,242
Prepared coal:						
Mechanically cleaned ⁴	(NA)	2,566	11,204	(NA)	2,589	9,842
Other preparation only ⁵	(NA)	603	2,442	(NA)	(¹)	(¹)
SOUTH ATLANTIC						
Raw coal:						
Shipped for use without preparation.....	xxx	20,713	91,634	xxx	155,431	1243,807
Used for power or heat.....	28	xxx	xxx	(²)	xxx	xxx
For preparation ³	125,005	28,792	117,576	77,727	16,792	63,325
Prepared coal:						
Mechanically cleaned ⁴	(NA)	95,590	537,620	(NA)	78,263	377,464
Other preparation only ⁵	(NA)	37,066	182,282	(NA)	(¹)	(¹)
Used for power or heat.....	111	xxx	xxx	2199	xxx	xxx
Maryland						
Raw coal:						
Shipped for use without preparation.....	xxx	396	1,878	xxx	1431	1,923
For preparation ³	356	145	498	...	...	...
Prepared coal:						
Other preparation only ⁵	(NA)	493	2,075	(NA)	(¹)	(¹)
Virginia						
Raw coal:						
Shipped for use without preparation.....	xxx	7,110	26,862	xxx	18,131	133,742
For preparation ³	15,599	6,347	24,709	5,836	4,222	14,592
Prepared coal:						
Mechanically cleaned ⁴	(NA)	11,279	61,767	(NA)	7,236	35,603
Other preparation only ⁵	(NA)	8,291	41,022	(NA)	(¹)	(¹)
West Virginia						
Raw coal:						
Shipped for use without preparation.....	xxx	13,195	62,841	xxx	146,860	1208,099
For preparation ³	109,050	22,300	92,369	71,891	12,570	48,733
Prepared coal:						
Mechanically cleaned ⁴	(NA)	84,311	475,853	(NA)	71,027	341,861
Other preparation only ⁵	(NA)	28,282	139,185	(NA)	(¹)	(¹)
Georgia						
Raw coal (shipped for use without preparation).....	xxx	12	53	xxx	9	43
EAST SOUTH CENTRAL						
Raw coal:						
Shipped for use without preparation.....	xxx	17,275	63,392	xxx	132,134	1137,543
Used for power or heat.....	19	xxx	xxx	(²)	xxx	xxx
For preparation ³	65,280	14,621	59,683	42,317	9,521	41,928
Prepared coal:						
Mechanically cleaned ⁴	(NA)	51,448	250,332	(NA)	38,804	176,193
Other preparation only ⁵	(NA)	19,113	92,217	(NA)	(¹)	(¹)
Used for power or heat.....	29	xxx	xxx	254	xxx	xxx

See footnotes at end of table.

Table 3.--PRIMARY PRODUCTS OF THE BITUMINOUS COAL AND LIGNITE INDUSTRIES, BY DIVISION AND STATE: 1958 AND 1954--Continued

Product, division, and State	1958			1954		
	Production for use at same establishment (1,000 short tons)	Total shipments including interplant transfers		Production for use at same establishment (1,000 short tons)	Total shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
EAST SOUTH CENTRAL—Continued						
Kentucky						
Raw coal:						
Shipped for use without preparation.....	xxx	14,347	51,968	xxx	124,063	199,814
For preparation ³	47,638	12,137	50,398	29,343	8,454	37,553
Prepared coal:						
Mechanically cleaned ⁴	(NA)	41,533	186,512	(NA)	29,933	120,955
Other preparation only ⁵	(NA)	14,433	65,742	(NA)	(¹)	(¹)
Tennessee						
Raw coal:						
Shipped for use without preparation.....	xxx	2,656	10,346	xxx	15,949	123,463
For preparation ³	2,360	697	2,519	474	97	311
Prepared coal:						
Mechanically cleaned ⁴	(NA)	383	1,507	(NA)	472	2,045
Other preparation only ⁵	(NA)	2,714	11,687	(NA)	(¹)	(¹)
Alabama						
Raw coal:						
Shipped for use without preparation.....	xxx	272	1,078	xxx	12,122	14,266
For preparation ³	15,282	1,787	6,766	12,500	970	4,064
Prepared coal:						
Mechanically cleaned ⁴	(NA)	9,532	62,313	(NA)	8,399	53,193
Other preparation only ⁵	(NA)	1,966	14,788	(NA)	(¹)	(¹)
WEST SOUTH CENTRAL						
Raw coal:						
Shipped for use without preparation.....	xxx	256	1,836	xxx	1,710	(D)
Used for power or heat.....	(⁸)	xxx	xxx	(²)	xxx	xxx
For preparation ³	1,888	...	...	791	39	214
Prepared coal:						
Mechanically cleaned ⁴	(NA)	539	3,882	(NA)	685	5,150
Other preparation only ⁵	(NA)	1,252	8,636	(NA)	(¹)	(¹)
Used for power or heat.....	(⁸)	xxx	xxx	² 1	xxx	xxx
Arkansas						
Raw coal:						
Shipped for use without preparation.....	xxx	49	378	xxx	1480	(D)
For preparation ³	341	...	...	...	...	...
Prepared coal:						
Other preparation only ⁵	(NA)	341	2,690	(NA)	(¹)	(¹)
Oklahoma						
Raw coal:						
Shipped for use without preparation.....	xxx	207	1,458	xxx	11,230	(D)
For preparation ³	1,547	...	...	(D)	39	214
Prepared coal:						
Mechanically cleaned ⁴	(NA)	539	3,882	(NA)	685	5,150
Other preparation only ⁵	(NA)	911	5,946	(NA)	(¹)	(¹)
MOUNTAIN						
Raw coal:						
Shipped for use without preparation.....	xxx	561	2,923	xxx	10,167	(D)
Used for power or heat.....	7	xxx	xxx	(²)	xxx	xxx
For preparation ³	611,858	101,804	1013,836	1,853	(D)	(D)
Prepared coal:						
Mechanically cleaned ⁴	(NA)	3,567	27,062	(NA)	2,130	14,871
Other preparation only ⁵	(NA)	6,267	33,003	(NA)	(¹)	(¹)
Used for power or heat.....	22	xxx	xxx	² 142	xxx	xxx
Montana						
Raw coal:						
Shipped for use without preparation.....	xxx	29	148	xxx	11,476	14,070
For preparation ³	6182	(⁶)	(D)	14	...	...
Prepared coal:						
Mechanically cleaned ⁴	(NA)	187	1,021	(NA)	13	88
Other preparation only ⁵	(NA)			(NA)	(¹)	(¹)
See footnotes at end of table.						

See footnotes at end of table.

Table 3.--PRIMARY PRODUCTS OF THE BITUMINOUS COAL AND LIGNITE INDUSTRIES, BY DIVISION AND STATE: 1958 AND 1954--Continued

Product, division, and State	1958			1954		
	Production for use at same establishment (1,000 short tons)	Total shipments including interplant transfers		Production for use at same establishment (1,000 short tons)	Total shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
MOUNTAIN—Continued						
Wyoming						
Raw coal:						
Shipped for use without preparation.....	xxx	63	304	xxx	12,745	11,177
For preparation ³	1,518	...	...	12	...	...
Prepared coal:						
Mechanically cleaned ⁴	(NA)	1,572	5,279	(NA)	11	64
Other preparation only ⁵	(NA)			(NA)	(1)	(1)
Colorado						
Raw coal:						
Shipped for use without preparation.....	xxx	344	1,760	xxx	12,905	15,847
For preparation ³	62,963	(6)	(D)	22	...	...
Prepared coal:						
Mechanically cleaned ⁴	(NA)	2,777	17,369	(NA)	17	90
Other preparation only ⁵	(NA)			(NA)	(1)	(1)
New Mexico						
Raw coal:						
Shipped for use without preparation.....	xxx	65	421	xxx	197	(D)
For preparation ³	64	...	...	30	...	...
Prepared coal:						
Mechanically cleaned ⁴	(NA)	57	344	(NA)	25	160
Other preparation only ⁵	(NA)			(NA)	(1)	(1)
Utah						
Raw coal:						
Shipped for use without preparation.....	xxx	52	236	xxx	12,933	(D)
For preparation ³	67,131	(6)	(D)	1,775	(D)	(D)
Prepared coal:						
Mechanically cleaned ⁴	(NA)	3,492	26,633	(NA)	2,064	14,469
Other preparation only ⁵	(NA)	1,749	9,419	(NA)	(1)	(1)
Idaho and Arizona						
Raw coal (shipped for use without preparation).....	xxx	8	54	xxx	11	68
PACIFIC ¹¹						
Raw coal:						
Shipped for use without preparation.....	xxx	23	156	xxx	128	(D)
For preparation ³	6397	(10)	(10)	928	(D)	(D)
Prepared coal:						
Mechanically cleaned ⁴	(NA)	237	1,881	(NA)	591	4,307
Used for power or heat.....	2	xxx	xxx	28	xxx	xxx
LIGNITE						
Raw coal:						
Shipped for use without preparation.....	xxx	349	919	xxx	14,238	10,330
Used for power or heat.....	(8)	xxx	xxx	(2)	xxx	xxx
For preparation ³	3,897	...	...	...	...	...
Prepared coal:						
Other preparation only ⁵	(NA)	3,895	10,102	(1)	(1)	(1)
Used for power or heat.....	1	xxx	xxx	27	xxx	xxx

D Withheld to avoid approximately disclosing data for individual companies.

NA Not available.

¹Figures for coal receiving "Other preparation only" are included with those for coal shipped for use without preparation.²Figure for raw coal is included with figure for prepared coal.³For 1954, represents coal for mechanical cleaning only. For 1958, coal produced for other preparation only in the United States as a whole and prepared at same establishment amounted to 77,859 thousand tons. Separate data were not obtained in 1958 on shipments of coal for such preparation only; however, preparation plants reported receiving 23,612 thousand tons at a cost of \$90,285 thousand for such preparation only.⁴Represents coal cleaned by wet-washing or pneumatic methods.⁵Represents such methods as crushing, screening, or sizing.⁶Figures for coal shipped for preparation are included with those for coal mined and prepared at the same establishment.⁷Figures for Indiana are included with those for Illinois.⁸Less than 500 tons.⁹Includes value added in resale of coal purchased for resale without preparation.¹⁰Figures for Pacific are included with those for Mountain.¹¹For 1958 all production was from Washington.

1958

Census of
Mineral
Industries

Industry and Product Reports

(Subject to Revision)

May 1960

MIC(P)-12A-2

BITUMINOUS COAL AND LIGNITE MINING SERVICES

(S.I.C. CODES 1213 AND 1214)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts of the Bituminous Coal and Lignite Mining Services Industries were valued at \$21.4 million, an increase of 22 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in these industries showed an increase of 5 percent from 1954 to 1958 to a total of 1.5 thousand employees in 1958. Value added in mining services in these industries amounted to \$15.0 million in 1958, an increase of 20 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, purchases for resale, purchased fuels and

electric energy, subcontract work, and purchased machinery from receipts and capital expenditures. It avoids the duplication in receipts which results from one establishment performing services for another. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE BITUMINOUS COAL AND LIGNITE MINING SERVICES INDUSTRIES IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958			1954			1939
		Bituminous coal and lignite mining services industries, total	Bituminous coal and lignite stripping and auger mining services industry	Bituminous coal and lignite mining services, n.e.c., industry	Bituminous coal and lignite mining services industries, total	Bituminous coal and lignite stripping and auger mining services industry	Bituminous coal and lignite mining services, n.e.c., industry	Bituminous coal and lignite mining services industries
Establishments:								
Total.....	Number.....	157	137	20	152	137	15	32
With 20 or more employees.....	...do.....	20	18	2	20	(NA)	(NA)	(NA)
All employees:								
Number.....	Number.....	1,512	1,315	197	1,446	1,284	162	228
Payroll.....	Thousand dollars	7,272	6,404	868	6,068	5,300	768	326
Production and development workers:								
Number.....	Number.....	1,378	1,195	183	1,331	1,196	135	199
Man-hours.....	Thousands.....	2,489	2,119	370	2,458	2,202	256	365
Wages.....	Thousand dollars	6,466	5,652	814	5,511	4,923	588	240
Value added in mining services.....	...do.....	14,980	13,480	1,500	12,517	11,190	1,327	477
Cost of supplies, purchased fuel and electric energy, and subcontract work	...do.....	6,177	5,398	779	4,938	4,560	378	135
Subcontract work only.....	...do.....	754	697	57	751	750	1	(NA)
Cost of purchased machinery installed.	...do.....	2,907	2,737	170	2,552	2,509	43	(NA)
Receipts for services.....	...do.....	21,409	19,130	2,279	17,596	15,960	1,636	612
Capital expenditures.....	...do.....	2,655	2,485	170	2,411	2,299	112	41

NA Not available.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

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Receipts for services of the Bituminous Coal and Lignite Stripping and Auger Mining Services Industry were \$19.1 million, an increase of 20 percent from 1954 and receipts for services of the Bituminous Coal and Lignite Mining Services, Except Stripping, Industry were \$2.3 million, an increase of 39 percent over 1954.

The Bituminous Coal and Lignite Stripping and Auger Mining Services Industry represents establishments primarily engaged in overburden stripping and strip and auger mining for bituminous coal or lignite for others on a contract, fee, or other basis. The Bituminous Coal and Lignite Mining Services, Except Stripping, Industry represents establishments primarily engaged in performing bituminous coal and lignite mining services, except stripping and auger mining services, for others on a contract, fee, or other basis. Included are services such as drilling, shaft sinking, and mine tunnelling.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Companies engaged in bituminous coal and lignite mining services, in general, submitted one report for all such services performed in all States. These reports were classified on the basis of the principal kind of work performed and the principal State in which the service was performed.

RECEIPTS FOR SERVICES

The receipts for services reported by establishments classified in the Bituminous Coal and Lignite Mining Services Industries consisted not only of services described above as primary to these industries, but also included receipts for secondary services (which are primary in other industries), and receipts for products purchased and resold without further processing at the establishment. The total receipts of establishments classified in the Bituminous Coal and Lignite Mining Services Industries amounted to \$21.4 million. Of this total, over 99 percent represented receipts for primary services.

The total receipts for services for an industry, which is the total value of receipts

of establishments classified in the industry, should be clearly distinguished from the total receipts for primary services of the industry by all establishments performing services. Table 3 shows the receipts for services primary to the two service industries covered in this report as \$21.7 million. Of this total, \$21.3 million or 98 percent were receipts of establishments classified in the Bituminous Coal and Lignite Mining Services Industries, while the remainder was secondary services by establishments classified in other industries.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the performance of secondary services for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with service statistics (table 3) which show the primary services of the industries performed by all establishments, whether classified in the Bituminous Coal and Lignite Mining Services Industries or not.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.--GENERAL STATISTICS FOR THE BITUMINOUS COAL AND LIGNITE MINING SERVICES INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

Industry, division, and State	1958												1954	
	Establish- ments, number		All employees		Production and development workers			Value added in mining services	Cost of supplies, purchased energy, and sub- contract work	Cost of pur- chased machin- ery in- stalled	Receipts for services	Capital expendi- tures	All em- ploy- ees, number	Value added in mining services
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
UNITED STATES														
Bituminous coal and lignite mining ser- vices industries, total.....	157	20	1,512	7,272	1,378	2,489	6,466	14,980	6,177	2,907	21,409	2,655	1,446	12,517
Bituminous coal and lignite stripping and auger mining services industry	137	18	1,315	6,404	1,195	2,119	5,652	13,480	5,398	2,737	19,130	2,485	1,284	11,190
Bituminous coal and lignite mining services, n.e.c., industry.	20	2	197	868	183	370	814	1,500	779	170	2,279	170	162	1,327
MIDDLE ATLANTIC (Pennsylvania)														
Bituminous coal mining services industries, total..	62	7	615	2,820	566	1,157	2,544	5,759	2,539	1,354	8,117	1,535	722	5,482
Bituminous coal stripping and auger mining services industry	57	5	450	2,041	412	841	1,818	4,534	1,942	1,189	6,295	1,370	722	5,482
Bituminous coal mining services, n.e.c., industry.	5	2	165	779	154	316	726	1,225	597	165	1,822	165		
EAST NORTH CENTRAL														
Bituminous coal mining services industries.....	14	1	66	289	55	114	261	576	433	72	1,066	15	(NA)	(NA)
Ohio														
Bituminous coal mining services industries.....	11	1	65	284	54	112	256	557	405	72	1,019	15	67	563
SOUTH ATLANTIC														
Bituminous coal mining services industries.....	53	7	586	2,871	531	897	2,578	5,560	2,233	969	7,929	833	385	3,054
Bituminous coal stripping and auger mining services industry.....	47	7	560	2,799	508	855	2,507	5,397	2,135	964	7,668	828	(NA)	(NA)
Virginia														
Bituminous coal stripping and auger mining services industry.	4	2	113	646	100	168	555	1,444	304	643	1,968	423	...	...
West Virginia														
Bituminous coal mining services industries.....	46	5	453	2,089	411	691	1,887	3,934	1,769	288	5,619	372	385	3,054
Bituminous coal stripping and auger mining ser- vices industry...	40	5	427	2,017	388	649	1,816	3,771	1,671	283	5,358	367	(NA)	(NA)

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

Table 2.--GENERAL STATISTICS FOR THE BITUMINOUS COAL AND LIGNITE MINING SERVICES INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Industry, division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining services	Cost of supplies, purchased energy, and sub- contract work	Cost of pur- chased machin- ery in- stalled	Receipts for services	Capital expendi- tures	All em- ploy- ees, number	Value added in mining services
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
EAST SOUTH CENTRAL														
Bituminous coal mining services industries.....	16	4	199	1,067	188	260	914	2,286	697	451	3,221	213	(NA)	(NA)
Kentucky														
Bituminous coal mining services industries.....	8	3	118	676	111	158	570	1,347	368	416	2,003	128	67	1,139
WEST NORTH CENTRAL AND WEST SOUTH CENTRAL														
Bituminous coal and lignite mining ser- vices industries...	6	...	10	39	9	21	36	302	97	15	401	13	(NA)	(NA)
MOUNTAIN														
Bituminous coal and lignite mining ser- vices industries...	6	1	36	186	29	40	133	497	178	46	675	46	121	1,554

D Withheld to avoid approximately disclosing figures for individual companies.

NA Not available.

¹Includes data for two establishments in Washington. No establishments were reported in the Pacific Division for 1958.

Table 3.--RECEIPTS FOR SERVICES PRIMARY TO THE BITUMINOUS COAL AND LIGNITE MINING SERVICES INDUSTRIES PERFORMED BY ALL MINING SERVICES INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

Type of service, division, and State	1958		1954	Type of service, division, and State	1958		1954
	Raw coal mined	Receipts for services	Receipts for services ¹		Raw coal mined	Receipts for services	Receipts for services ¹
	(1,000 short tons)	(\$1,000)	(\$1,000)		(1,000 short tons)	(\$1,000)	(\$1,000)
United States, total.....	6,435	21,699	² 17,596	South Atlantic--Continued			
Stripping overburden and strip mining coal for others.....	5,245	15,822	14,103	Virginia, total.....	838	1,967	...
Auger mining.....	1,190	3,362	1,640	Stripping overburden and strip mining coal for others.....	573	1,310	...
Prospect, test and other drilling (including blasting).....	xxx	943	108	Auger mining.....	265	657	...
Sinking mine shafts and driving mine tunnels and other services.....	xxx	1,572	² 1,745	West Virginia.....	1,617	5,807	² 4,543
Middle Atlantic (Pennsylvania).....	2,008	8,155	² 7,766	Stripping overburden and strip mining coal for others.....	1,118	4,163	2,467
Stripping overburden and strip mining coal for others.....	1,969	6,242	6,768	Auger mining.....	499	1,384	1,332
Prospect, test, and other drilling (including blasting); sinking mine shafts and driving mine tunnels; and other services.....	xxx	1,821	(D)	East South Central.....	1,034	3,228	(NA)
East North Central.....	364	1,050	² 882	Stripping overburden and strip mining coal for others.....	718	2,170	(NA)
Stripping overburden and strip mining coal for others.....	292	782	814	Auger mining.....	316	1,048	(NA)
South Atlantic.....	2,542	8,116	² 4,543	Kentucky.....	706	2,035	² 1,409
Stripping overburden and strip mining coal for others.....	1,778	5,815	2,467	Stripping overburden and strip mining coal for others.....	430	1,137	1,261
Auger mining.....	764	2,041	1,332	Auger mining.....	276	888	148
				Alabama (Stripping overburden and strip mining coal for others only).....	213	661	395
				Mountain.....	(D)	749	² 1,937

D Withheld to avoid approximately disclosing figures for individual companies. NA Not available. xxx Not applicable. ¹Represents only receipts by the Bituminous Coal and Lignite Mining Services Industries. ²Includes receipts for secondary services and products purchased for resale amounting for the United States as a whole to about \$40 thousand. ³Includes data for two establishments in Washington.

GROUP 13

GROUP 14

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

June 1960

MIC(P)-13B-1

CRUDE PETROLEUM AND NATURAL GAS

(S.I.C. CODE 1311)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments and receipts of the Crude Petroleum and Natural Gas Industry were valued at \$8,386 million, an increase of 19 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 7 percent from 1954 to 1958 to a total of 185 thousand employees in 1958. Value added in mining in the industry amounted to \$7,382 million in 1958, an increase of 20 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, gas purchased for gas lift and repressuring, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments and receipts which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958			1954			1939 ¹
		Total	Crude petroleum subindustry	Natural gas subindustry	Total	Crude petroleum subindustry	Natural gas subindustry	
Establishments:								
Total.....	Number.....	12,170	10,787	1,383	11,508	10,101	1,407	8,605
With 20 or more employees.....	do.....	1,089	973	116	1,042	(NA)	(NA)	(NA)
All employees:								
Number.....	Number.....	184,989	169,323	15,666	172,506	161,282	11,224	136,051
Payroll.....	Thousand dollars	1,073,500	994,588	78,912	835,740	790,946	44,794	234,899
Production and development workers:								
Number.....	Number.....	102,369	92,281	10,088	109,792	101,542	8,250	105,505
Man-hours.....	Thousands.....	202,333	182,482	19,851	216,581	201,086	15,495	190,674
Wages.....	Thousand dollars	497,462	452,837	44,625	459,955	430,497	29,458	155,700
Value added in mining.....	do.....	7,382,259	6,864,411	517,848	6,129,213	5,741,256	387,957	1,071,989
Cost of supplies, gas purchased for gas lift and repressuring, purchased fuel and electric energy, and contract work.....	do.....	2,508,676	2,250,306	258,370	2,218,290	2,083,668	134,622	303,965
Contract work only.....	do.....	1,413,079	1,289,678	123,501	1,458,807	1,372,495	86,312	199,034
Cost of purchased machinery installed.....	do.....	437,054	392,866	44,188	621,048	588,211	32,837	(NA)
Value of shipments and receipts.....	do.....	8,385,798	7,801,171	584,627	7,070,097	6,642,452	427,645	² 1,375,954
Capital expenditures.....	do.....	1,942,191	1,706,412	235,779	1,898,454	1,770,683	127,771	(NA)

NA Not available.

¹Except for number of establishments, includes data for 2 nonproducing establishments in the Natural Gas Liquids Industry.²Represents value of production and other receipts.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

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During 1958, shipments and receipts of the Crude Petroleum Subindustry were valued at \$7,801 million, an increase of 17 percent over 1954. Average employment in this subindustry showed an increase of 5 percent from 1954 to 1958 to a total of 169 thousand employees in 1958. Value added in the subindustry amounted to \$6,864 million in 1958, an increase of 20 percent from 1954.

During 1958, shipments and receipts of the Natural Gas Subindustry were valued at \$585 million, an increase of 37 percent over 1954. Average employment in this subindustry showed an increase of 40 percent from 1954 to 1958 to a total of 16 thousand employees in 1958. Value added in the subindustry amounted to \$518 million in 1958, an increase of 33 percent from 1954.

The Crude Petroleum and Natural Gas Industry represents establishments engaged primarily in operating oil and gas field properties. Such activities include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; and the operation of separators, emulsion breakers, desilting equipment; and all other activities incident to making oil and gas marketable up to the point of shipment from the producing property. This industry also includes the production of oil through the mining and extraction of oil from oil shale and oil sands. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

In tables 1 and 2, separate figures are given for establishments classified in the Crude Petroleum Subindustry and the Natural Gas Subindustry. The Crude Petroleum Subindustry represents establishments primarily engaged in operating oil field properties. The Natural Gas Subindustry represents establishments primarily engaged in operating gas field properties.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments and receipts or capital expenditures amounting to \$500 or more. Of about 36,300 establishments covered in the 1958 Census, approximately three-fourths were operated by single establishment companies. A single report was obtained from such companies.

For oil and gas field operations, an establishment represents all oil and gas field operations of a reporting company in one State.

The Crude Petroleum and Natural Gas Industry includes establishments performing oil and gas field services for others whose value of shipments of oil and gas were greater than the

receipts for services. Companies were permitted, however, to prepare separate reports for their contract service activities and their oil and gas production; and a few companies prepared such separate reports.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Crude Petroleum and Natural Gas Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries) and receipts for contract work performed for other establishments. The total value of shipments and other receipts of establishments classified in the Crude Petroleum and Natural Gas Industry amounted to \$8,386 million. The figure for value of products primary to the industry is not available at the time of this preliminary release. However, for establishments classified in the Crude Petroleum Subindustry the total value of shipments and other receipts amounted to \$7,801 million, of which \$6,920 million were products primary to the subindustry. For establishments classified in the Natural Gas Subindustry the total value of shipments and other receipts amounted to \$585 million, of which \$460 million were products primary to the subindustry.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3A, indicates that the value of crude petroleum, field condensate and drips, and natural gas shipped by all producers of such products was \$8,405 million. Of this total, products primary to the Crude Petroleum Subindustry were valued at \$7,098 million; and \$6,920 million or 97 percent of this total represented shipments by establishments classified in the subindustry; products primary to the Natural Gas Subindustry were valued at \$1,307 million, of which \$460 million or 35 percent represented shipments by establishments classified in the subindustry.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3A) which show the shipments by all producers of the primary products of the industry.

WELLS STATISTICS

Tables 3B and 3C show statistics for producing and shut-in wells, and wells drilled during 1958, for all operators of oil and gas field properties whether they are classified in the Crude Petroleum and Natural Gas Industry or in the Oil and Gas Field Services Industries.

The 1958 census covered a total of 473 thousand producing oil wells, an increase of 11 percent from 1954; and a total of 75 thousand producing gas wells, an increase of 13 percent since 1954. In addition, the report shows 39 thousand oil wells and 8 thousand gas wells shut in during December 1958.

Operators reported 47 thousand wells were drilled during 1958 as compared with 52 thousand in 1954. Of the 1958 total, 28 thousand were producing wells and 19 thousand were dry holes and service wells. In 1958, the total footage drilled was 193.7 million feet as compared with 210.8 million in 1954. The total cost of drilling and equipping wells in 1958 was \$2,425 million an increase of 5 percent from 1954. Oil wells cost \$1,310 million; gas wells, \$441 million; and dry holes and service wells, \$674 million. Of the total cost for drilling and equipping wells \$1,005 million was paid to contractors and \$1,420 million was borne by operators of oil and gas field properties. The \$1,420 million borne by operators was distributed as \$733 million for drilling, \$385 million for casing, and \$302 million for equipment for flowing and pumping.

COVERAGE

The large number of small operations and the prevalence of operation of properties or drilling for oil and gas under short term agreements and joint ventures in widely scattered areas make coverage by the usual Census techniques particularly difficult. For 1958, as for 1954, a supplemental survey of oil and gas field operations was conducted to increase coverage. The totals for 1958 indicate that the Census

probably covered about 97 percent of all crude petroleum production and about 95 percent of all natural gas shipped or used. Apparent coverage of number of productive wells was somewhat lower, about 91 percent, being least complete for stripper wells and wells on farms. The figures as published for number of wells drilled appear to represent over 98 percent coverage of drilling during 1958. In general, the coverage for 1958 appears to be slightly higher than for 1954, but the differences in coverage at the United States level may amount to less than one percent for most items.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports have been issued for other industries. Also, summaries of preliminary United States totals for each mining industry and totals for each State have been issued. Final industry reports and final State reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Division, State, and subindustry	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, gas purchased for gas lift and repressuring, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States:														
Crude petroleum and natural gas industry, total.....	12,170	1,089	184,989	1,073,500	102,369	202,333	497,462	7,382,289	2,508,676	437,054	8,385,798	1,942,191	172,506	6,129,233
Crude petroleum subindustry.....	10,787	973	169,323	994,588	92,281	182,482	452,837	6,864,411	2,250,306	392,866	7,801,171	1,706,412	161,282	5,741,256
Natural gas subindustry.....	1,383	116	15,666	78,912	10,088	19,851	44,625	517,848	258,370	44,188	584,627	235,779	11,224	387,957
Middle Atlantic:														
Crude petroleum and natural gas industry, total.....	869	34	5,188	23,041	3,917	7,422	14,618	45,094	23,070	3,000	57,153	14,011	7,707	55,139
Crude petroleum subindustry.....	668	20	3,630	16,494	2,632	4,983	9,646	27,006	8,816	1,006	33,920	2,908	5,444	20,314
Natural gas subindustry.....	201	14	1,558	6,547	1,285	2,439	4,972	18,088	14,254	1,994	23,233	11,103	2,263	34,825
New York:														
Crude petroleum and natural gas industry, total.....	201	6	1,007	6,149	585	1,151	2,083	7,137	3,157	358	8,655	1,997	2,345	7,965
Crude petroleum subindustry.....	185	5	918	5,517	517	1,009	1,876	6,023	2,080	203	7,627	679	2,078	6,998
Natural gas subindustry.....	16	1	89	632	68	142	207	1,114	1,077	155	1,028	1,318	267	967
Pennsylvania:														
Crude petroleum and natural gas industry, total.....	668	28	4,181	16,892	3,332	6,271	12,535	37,957	19,913	2,642	48,498	12,014	5,362	47,174
Crude petroleum subindustry.....	483	15	2,712	10,977	2,115	3,974	7,770	20,983	6,736	803	26,293	2,229	3,366	13,316
Natural gas subindustry.....	185	13	1,469	5,915	1,217	2,297	4,765	16,974	13,177	1,839	22,205	9,785	1,996	33,858
East North Central:														
Crude petroleum and natural gas industry, total.....	1,386	98	11,446	55,540	8,057	14,731	33,021	256,457	76,828	17,346	308,091	42,540	12,380	207,760
Crude petroleum subindustry.....	1,279	96	10,812	52,699	7,580	13,866	31,001	251,382	72,836	16,636	301,461	39,393	11,659	200,438
Natural gas subindustry.....	107	2	634	2,841	477	865	2,020	5,075	3,992	710	6,630	3,147	721	7,322
Ohio:														
Crude petroleum and natural gas industry, total.....	443	12	3,019	16,224	1,455	2,547	5,059	17,883	10,933	2,767	23,009	8,574	3,349	12,528
Crude petroleum subindustry.....	348	10	2,412	13,490	998	1,721	3,113	13,339	7,821	2,083	17,650	5,593	2,680	5,645
Natural gas subindustry.....	95	2	607	2,734	457	826	1,946	4,544	3,112	684	5,359	2,981	669	6,883
Indiana (crude petroleum and natural gas industry).....	268	12	1,179	5,338	785	1,329	2,728	25,389	8,663	1,840	31,345	4,547	1,238	19,951
Illinois (crude petroleum and natural gas industry).....	546	62	6,204	28,856	4,983	9,003	21,319	195,427	48,787	11,870	229,535	26,549	6,428	150,753
Michigan (crude petroleum and natural gas industry).....	129	12	1,044	5,122	834	1,852	3,915	17,758	8,445	869	24,202	2,870	1,365	24,528
West North Central:														
Crude petroleum and natural gas industry, total.....	1,090	118	11,052	54,023	7,808	15,035	33,766	384,605	160,069	34,737	486,881	92,530	10,378	296,266
Crude petroleum subindustry.....	1,052	111	10,534	51,266	7,467	14,359	32,068	348,083	152,769	33,711	447,957	86,606	9,785	267,380
Natural gas subindustry.....	38	7	518	2,757	341	676	1,698	36,522	7,300	1,026	38,924	5,924	593	28,886
North Dakota (crude petroleum and natural gas industry).....	55	5	563	3,447	318	682	1,763	22,437	33,663	6,200	41,308	20,992	671	(²)
Nebraska (crude petroleum and natural gas industry).....	109	8	667	3,405	392	722	1,771	48,581	16,716	3,634	57,523	11,408	324	18,551
Kansas (crude petroleum and natural gas industry).....	905	105	9,399	44,655	7,085	13,610	30,186	313,489	109,246	24,877	387,716	59,896	9,238	285,117
Missouri and South Dakota (crude petroleum and natural gas industry) ³	21	...	423	2,516	13	21	46	98	444	26	334	234	145	(²)
South Atlantic:														
Crude petroleum and natural gas industry, total.....	853	27	3,965	14,241	3,230	5,833	10,886	40,816	20,326	2,859	48,899	15,102	4,136	46,870
Crude petroleum subindustry.....	333	8	1,342	5,081	1,177	2,204	4,296	5,828	4,249	482	8,634	1,925	1,580	5,127
Natural gas subindustry.....	520	19	2,623	9,160	2,053	3,629	6,590	34,988	16,077	2,377	40,265	13,177	2,556	41,743
West Virginia:														
Crude petroleum and natural gas industry, total.....	830	25	3,788	13,271	3,127	5,611	10,321	39,647	17,242	2,768	46,060	13,597	3,837	48,525
Crude petroleum subindustry.....	318	6	1,206	4,236	1,101	2,032	3,829	39,647	2,327	447	46,060	1,079	1,340	7,224
Natural gas subindustry.....	512	19	2,582	9,035	2,026	3,579	6,492		14,915	2,321		12,518	2,497	41,301
Florida (crude petroleum and natural gas industry).....	12	2	134	843	74	169	465	1,169	1,808	35	846	659	299	(²)
Maryland, Virginia, and Georgia (crude petroleum and natural gas industry).....	11	...	43	127	29	53	100							

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Division, State, and subindustry	1958													1954	
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, gas purchased for gas lift and repressuring, purchased energy, and contract work (\$1,000)	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining	
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages								
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
East South Central:															
Crude petroleum and natural gas industry, total.....	567	56	5,385	25,612	4,115	8,043	17,727	170,410	73,714	14,072	210,106	48,090	4,633	124,426	
Crude petroleum subindustry.....	503	49	4,396	21,429	3,333	6,670	14,811	146,423	64,283	12,558	184,386	38,878	4,220	109,353	
Natural gas subindustry.....	64	7	989	4,183	782	1,373	2,916	23,987	9,431	1,514	25,720	9,212	413	15,073	
Kentucky:															
Crude petroleum and natural gas industry, total.....	372	30	3,078	11,338	2,625	4,927	9,019	51,629	21,184	5,065	61,766	16,112	2,889	46,407	
Crude petroleum subindustry.....	324	25	2,192	7,823	1,898	3,667	6,391	36,337	13,635	3,722	45,923	7,771	2,543	34,304	
Natural gas subindustry.....	48	5	886	3,515	727	1,260	2,628	15,292	7,549	1,343	15,843	8,341	346	12,103	
Tennessee (crude petroleum and natural gas industry).....	27	...	9	23	7	10	17	(²)	136	11	126	7	11	(²)	
Alabama (crude petroleum and natural gas industry).....	42	4	227	1,355	198	478	1,182	11,151	7,485	1,810	16,416	4,030	104	1,181	
Mississippi:															
Crude petroleum and natural gas industry, total.....	126	22	2,071	12,896	1,285	2,628	7,509	107,644	44,909	7,186	131,798	27,941	1,629	76,874	
Crude petroleum subindustry.....	117	20	1,972	12,237	1,233	2,518	7,228	98,971	43,110	7,024	122,035	27,070	1,569	73,913	
Natural gas subindustry.....	9	2	99	659	52	110	281	8,673	1,799	162	9,763	871	60	2,961	
West South Central:															
Crude petroleum and natural gas industry, total.....	5,612	574	115,723	693,579	58,243	117,180	293,843	4,683,633	1,652,368	274,525	5,281,636	1,318,890	103,867	2,856,800	
Crude petroleum subindustry.....	5,276	521	108,974	654,592	54,564	109,173	274,555	4,372,075	1,513,865	243,218	4,934,144	1,185,014	100,424	2,646,660	
Natural gas subindustry.....	336	53	6,749	38,987	3,679	8,007	19,288	311,558	138,503	31,307	357,492	123,876	3,443	210,140	
Arkansas:															
Crude petroleum and natural gas industry, total.....	209	23	1,926	9,727	1,246	2,441	5,536	70,562	18,802	3,918	82,204	11,078	1,709	61,194	
Crude petroleum subindustry.....	204	21	1,824	9,312	1,183	2,352	5,310	68,180	16,204	3,765	78,965	9,184	1,651	60,398	
Natural gas subindustry.....	5	2	102	415	63	89	226	2,382	2,598	153	3,239	1,894	58	796	
Louisiana:															
Crude petroleum and natural gas industry, total.....	528	80	20,562	131,081	11,973	25,465	71,266	1,182,713	546,304	85,016	1,327,429	486,604	16,956	738,888	
Crude petroleum subindustry.....	444	62	18,074	115,700	10,462	21,896	62,594	1,043,857	485,390	69,265	1,162,236	436,276	15,773	683,386	
Natural gas subindustry.....	84	18	2,488	15,381	1,511	3,569	8,672	138,856	60,914	15,751	165,193	50,328	1,183	55,502	
Oklahoma:															
Crude petroleum and natural gas industry, total.....	1,653	137	25,247	140,475	12,188	22,832	52,954	522,334	203,249	27,079	587,781	164,881	22,046	433,563	
Crude petroleum subindustry.....	1,587	132	24,728	137,560	11,977	22,447	52,074	506,025	192,081	25,593	568,435	155,264	21,703	416,436	
Natural gas subindustry.....	66	5	519	2,915	211	385	880	16,309	11,168	1,486	19,346	9,617	343	17,127	
Texas:															
Crude petroleum and natural gas industry, total.....	3,222	334	67,988	412,296	32,836	66,442	164,087	2,908,024	884,013	158,512	3,294,222	656,327	63,156	2,623,155	
Crude petroleum subindustry.....	3,041	306	64,348	392,020	30,942	62,478	154,577	2,754,018	820,190	144,595	3,124,508	594,290	61,297	2,486,440	
Natural gas subindustry.....	181	28	3,640	20,276	1,894	3,964	9,510	154,011	63,823	13,917	169,714	62,037	1,859	136,715	
Mountain:															
Crude petroleum and natural gas industry, total.....	1,194	113	15,427	94,089	7,113	14,599	37,949	842,396	321,020	62,951	951,290	275,077	12,167	529,746	
Crude petroleum subindustry.....	1,095	103	13,311	82,675	5,856	12,137	32,027	789,299	257,924	58,908	896,611	209,520	11,418	509,387	
Natural gas subindustry.....	99	10	2,116	11,414	1,257	2,462	5,922	53,097	63,096	4,043	54,679	65,557	749	20,359	
Montana (crude petroleum and natural gas industry).....	170	14	1,670	10,320	751	1,458	4,030	63,260	26,457	4,148	77,378	16,487	1,702	23,677	
Wyoming:															
Crude petroleum and natural gas industry, total.....	209	28	4,042	26,208	1,904	3,966	10,714	272,559	59,752	12,875	296,110	49,076	4,181	193,467	
Crude petroleum subindustry.....	200	26	3,583	23,123	1,824	3,801	10,229	264,790	49,166	11,709	286,825	38,840	4,181	193,467	
Natural gas subindustry.....	9	2	459	3,085	80	165	485	7,769	10,586	1,166	9,285	10,236			
Colorado:															
Crude petroleum and natural gas industry, total.....	417	34	4,059	25,229	1,134	2,394	6,276	132,705	40,164	15,353	155,165	33,057	2,340	107,149	
Crude petroleum subindustry.....	395	31	3,864	24,048	1,017	2,115	5,676	127,027	33,308	14,868	148,913	26,290	2,340	107,149	
Natural gas subindustry.....	22	3	195	1,181	117	279	600	5,678	6,856	485	6,252	6,767			
New Mexico:															
Crude petroleum and natural gas industry, total.....	313	29	4,666	26,043	2,783	5,680	13,987	314,314	143,005	22,778	347,743	132,354	3,249	209,219	
Crude petroleum subindustry.....	265	27	3,428	20,193	1,869	3,957	9,888	281,131	103,235	20,915	314,316	90,965	2,870	194,155	
Natural gas subindustry.....	48	2	1,238	5,850	914	1,723	4,099	33,183	39,770	1,863	33,427	41,389	379	15,064	
Utah (crude petroleum and natural gas industry).....	58	8	911	5,896	496	1,020	2,767	60,454	49,659	7,727	74,443	43,397	569	(²)	
Idaho, Arizona, and Nevada (crude petroleum and natural gas industry).....	27	...	79	393	45	81	175	(²)	1,983	70	451	706	126	(²)	

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Division, State, and subindustry	1958												1954	
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, gas purchased for gas lift and repressuring, purchased energy, and contract work (\$1,000)	Cost of purchased machinery installed (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)	All employees, number	Value added in mining (\$1,000)
	Total	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)							
Pacific:														
Crude petroleum and natural gas industry, total.....	599	69	16,714	112,652	9,886	19,490	55,652	958,848	181,281	27,564	1,031,742	135,951	17,210	1,012,206
Crude petroleum subindustry.....	581	65	16,235	109,629	9,672	19,090	54,433	924,315	175,564	26,347	994,058	132,168	16,724	982,597
Natural gas subindustry.....	18	4	479	3,023	214	400	1,219	34,533	5,717	1,217	37,684	3,783	486	29,609
Washington and Oregon (crude petroleum and natural gas industry).....	15	2	130	1,072	21	41	101	(2)	1,099	12	7	395	116	(2)
California:														
Crude petroleum and natural gas industry, total.....	584	67	16,584	111,580	9,865	19,449	55,551	959,597	180,182	27,552	1,031,735	135,556	17,094	1,012,679
Crude petroleum subindustry.....	566	63	16,105	108,557	9,651	19,049	54,332	925,024	174,465	26,335	994,051	131,773	17,094	1,012,679
Natural gas subindustry.....	18	4	479	3,023	214	400	1,219	34,533	5,717	1,217	37,684	3,783		

¹For 1958, includes data for 89 employees paid Delaware; for 1954, includes data for 28 employees at central offices in Connecticut, Minnesota, Iowa, and North Carolina.

²Value added is not shown since the cost of supplies, gas purchased for gas lift and repressuring, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds the value of shipments and receipts and capital expenditures.

³For 1954, includes data for Iowa. No establishments in the Crude Petroleum and Natural Gas Industry, were reported operating in Iowa in 1958.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
UNITED STATES					
Crude petroleum, total.....	1,000 barrels.....	2,325,184	xxx	2,195,846	xxx
Shipped.....	..do.....	2,323,583	6,950,389	2,194,210	6,074,969
Used in lease operations: ¹					
For power or heat.....	..do.....	649	xxx	664	xxx
For other purposes, including losses.....	..do.....	952	xxx	972	xxx
Field condensate and drips shipped.....	..do.....	48,582	147,718	25,606	77,161
Natural gas gross production, total.....	Million cu. ft. ² ..	12,168,318	xxx	10,121,793	xxx
Gas from oil wells.....	..do.....	3,743,546	xxx	3,433,120	xxx
Gas from gas wells.....	..do.....	8,424,772	xxx	6,688,673	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	9,470,034	1,204,706	7,520,055	869,737
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	680,358	102,153	493,773	73,757
Used in lease operations: ¹					
For power or heat.....	..do.....	332,647	xxx	345,450	xxx
For gas lift (net).....	..do.....	230,530	xxx	4220,314	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	1,184,818	xxx	41,210,180	xxx
Net change in underground storage.....	..do.....	12,368	xxx	9,004	xxx
Vented to air, burned in flares, and other losses.....	..do.....	257,563	xxx	323,017	xxx

See footnotes at end of table.

Table 3A.--PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
MIDDLE ATLANTIC					
Crude petroleum, total.....	1,000 barrels.....	8,152	xxx	11,353	xxx
Shipped.....	...do.....	8,144	33,309	11,351	38,984
Used in lease operations: ¹					
For power or heat.....	...do.....	...	xxx	1	xxx
For other purposes, including losses.....	...do.....	8	xxx	1	xxx
Field condensate and drips shipped.....	...do.....	8	25	6	20
Natural gas gross production, total.....	Million cu. ft. ² ..	92,893	xxx	140,139	xxx
Gas from oil wells.....	...do.....	2,603	xxx	3,270	xxx
Gas from gas wells.....	...do.....	90,290	xxx	136,869	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	51,629	14,874	100,973	27,477
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	32,833	10,397	30,668	10,987
Used in lease operations: ¹					
For power or heat.....	...do.....	1,948	xxx	3,969	xxx
For gas lift (net).....	...do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	277	xxx	287	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	6,206	xxx	4,242	xxx
New York					
Crude petroleum shipped.....	1,000 barrels.....	1,650	6,692	2,598	8,934
Natural gas gross production, total.....	Million cu. ft. ² ..	2,988	xxx	3,890	xxx
Gas from oil wells.....	...do.....	124	xxx	718	xxx
Gas from gas wells.....	...do.....	2,864	xxx	3,172	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	1,269	414	880	264
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	1,470	581	1,881	1,073
Used in lease operations:					
For power or heat.....	...do.....	120	xxx	794	xxx
For gas lift (net).....	...do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	129	xxx	335	xxx
Pennsylvania					
Crude petroleum, total.....	1,000 barrels.....	6,502	xxx	8,755	xxx
Shipped.....	...do.....	6,494	26,617	8,753	30,050
Used in lease operations.....	...do.....	8	xxx	2	xxx
Natural gas gross production, total.....	Million cu. ft. ² ..	89,905	xxx	136,249	xxx
Gas from oil wells.....	...do.....	2,479	xxx	2,552	xxx
Gas from gas wells.....	...do.....	87,426	xxx	133,697	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	50,360	14,460	100,093	27,213
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	31,363	9,816	28,787	9,914
Used in lease operations: ¹					
For power or heat.....	...do.....	1,828	xxx	3,175	xxx
For gas lift (net).....	...do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	6,354	xxx	4,194	xxx

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
EAST NORTH CENTRAL					
Crude petroleum, total.....	1,000 barrels.....	99,366	xxx	86,630	xxx
Shipped.....	..do.....	99,274	295,517	86,566	253,588
Used in lease operations: ¹					
For power or heat.....	..do.....	35	xxx	36	xxx
For other purposes, including losses.....	..do.....	57	xxx	28	xxx
Field condensate and drips shipped.....	..do.....	...	...	9	19
Natural gas gross production, total.....	Million cu. ft. ² ...	56,608	xxx	50,030	xxx
Gas from oil wells.....	..do.....	26,000	xxx	21,221	xxx
Gas from gas wells.....	..do.....	30,608	xxx	28,809	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	29,783	5,758	23,958	5,486
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	15,301	4,410	12,365	5,450
Used in lease operations: ¹					
For power or heat.....	..do.....	7,829	xxx	6,142	xxx
For gas lift (net).....	..do.....	785	xxx	4,623	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	1,433	xxx	4,219	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	..do.....	1,477	xxx	4,623	xxx
Ohio					
Crude petroleum, total.....	1,000 barrels.....	5,355	xxx	2,985	xxx
Shipped.....	..do.....	5,352	15,791	2,983	8,201
Used in lease operations.....	..do.....	3	xxx	2	xxx
Natural gas gross production, total.....	Million cu. ft. ² ...	29,746	xxx	26,007	xxx
Gas from oil wells.....	..do.....	8,265	xxx	2,658	xxx
Gas from gas wells.....	..do.....	21,481	xxx	23,349	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	17,619	3,830	15,779	4,080
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	11,649	3,631	9,040	4,731
Used in lease operations: ¹					
For power or heat.....	..do.....	203	xxx	424	xxx
For gas lift (net).....	..do.....	...	xxx	411	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	183	xxx	452	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	..do.....	92	xxx	701	xxx
Indiana					
Crude petroleum, total.....	1,000 barrels.....	10,401	xxx	8,910	xxx
Shipped.....	..do.....	10,397	30,977	8,905	26,015
Used in lease operations.....	..do.....	4	xxx	5	xxx
Natural gas gross production, total.....	Million cu. ft. ² ...	1,156	xxx	2,285	xxx
Gas from oil wells.....	..do.....	957	xxx	999	xxx
Gas from gas wells.....	..do.....	199	xxx	1,286	xxx
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants ³.....	..do.....	467	72	1,673	366
Used in lease operations:					
For power or heat.....	..do.....	632	xxx	364	xxx
For gas lift (net).....	..do.....	...	xxx	42	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	...	xxx	473	xxx
Vented to air, burned in flares, and other losses.....	..do.....	57	xxx	173	xxx
Illinois					
Crude petroleum, total.....	1,000 barrels.....	75,924	xxx	63,308	xxx
Shipped.....	..do.....	75,839	226,429	63,253	186,496
Used in lease operations.....	..do.....	85	xxx	55	xxx
Natural gas gross production, total.....	Million cu. ft. ² ...	11,978	xxx	10,865	xxx
Gas from oil wells.....	..do.....	9,961	xxx	10,773	xxx
Gas from gas wells.....	..do.....	2,017	xxx	92	xxx
See footnotes at end of table.					

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of Measure	1958		1954	
		Quantity	Value	Quantity	Value
			(\$1,000)		(\$1,000)
EAST NORTH CENTRAL					
Illinois—Continued					
Disposition:					
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	...do.....	4,620	603	3,582	467
Used in lease operations: ¹					
For power or heat.....	...do.....	6,025	xxx	3,830	xxx
For gas lift (net).....	...do.....	613	xxx	4,546	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	720	xxx	4,907	xxx
Michigan					
Crude petroleum, total.....	1,000 barrels.....	7,686	xxx	11,427	xxx
Shipped.....	...do.....	7,686	22,320	11,425	32,876
Used in lease operations (For purposes other than power or heat only)...	...do.....	...	xxx	2	xxx
Natural gas gross production, total.....	Million cu. ft. ² ...	13,728	xxx	10,873	xxx
Gas from oil wells.....	...do.....	6,817	xxx	6,791	xxx
Gas from gas wells.....	...do.....	6,911	xxx	4,082	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	7,515	1,301	3,128	613
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	3,214	731	3,121	679
Used in lease operations: ¹					
For power or heat.....	...do.....	969	xxx	1,524	xxx
For gas lift (net).....	...do.....	172	xxx	64	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling and vented to air, burned in flares, and other losses.....	...do.....	1,858	xxx	3,036	xxx
WEST NORTH CENTRAL					
Crude petroleum, total.....	1,000 barrels.....	141,627	xxx	124,297	xxx
Shipped.....	...do.....	141,478	415,048	124,153	339,049
Used in lease operations:					
For power or heat.....	...do.....	91	xxx	71	xxx
For other purposes, including losses.....	...do.....	58	xxx	73	xxx
Field condensate and drips shipped.....	...do.....	230	571	21	64
Natural gas gross production, total.....	Million cu. ft. ² ...	573,891	xxx	404,787	xxx
Gas from oil wells.....	...do.....	50,039	xxx	19,629	xxx
Gas from gas wells.....	...do.....	523,852	xxx	385,158	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	528,456	60,009	389,931	46,644
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	31,175	6,243	6,262	713
Used in lease operations:					
For power or heat.....	...do.....	8,931	xxx	5,593	xxx
For gas lift (net).....	...do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	377	xxx	1,544	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	4,952	xxx	1,457	xxx
North Dakota					
Crude petroleum, total.....	1,000 barrels.....	13,932	xxx	5,866	xxx
Shipped.....	...do.....	13,853	40,405	5,780	12,509
Used in lease operations.....	...do.....	79	xxx	86	xxx
Natural gas gross production.....	Million cu. ft. ² ...	15,679	xxx	2,683	xxx
Disposition:					
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	...do.....	14,137	1,050	(D)	(D)
Used in lease operations:					
For power or heat.....	...do.....	513	xxx	623	xxx
For gas lift (net).....	...do.....	...	xxx	7	xxx
Vented to air, burned in flares, and other losses.....	...do.....	1,029	xxx	(D)	xxx
See footnotes at end of table.					

See footnotes at end of table.

Table 3A.--PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
WEST NORTH CENTRAL--Continued					
Nebraska					
Crude petroleum, total.....	1,000 barrels.....	17,857	xxx	7,593	xxx
Shipped.....	do.....	17,839	51,896	7,587	20,848
Used in lease operations.....	do.....	18	xxx	6	xxx
Natural gas gross production, total.....	Million cu. ft. ²	20,484	xxx	7,052	xxx
Disposition:					
Delivered to distributors, transmission companies and consumers, and net deliveries to natural gas liquids plants ³	do.....	16,629	4,955	(D)	(D)
Used in lease operations for power or heat.....	do.....	1,894	xxx	433	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	do.....	1,961	xxx	(D)	(D)
Kansas					
Crude petroleum, total.....	1,000 barrels.....	109,717	xxx	110,719	xxx
Shipped.....	do.....	109,665	322,415	110,668	305,412
Used in lease operations.....	do.....	52	xxx	51	xxx
Field condensate and drips shipped.....	do.....	204	506	21	64
Natural gas gross production, total.....	Million cu. ft. ²	537,702	xxx	395,014	xxx
Gas from oil wells.....	do.....	27,952	xxx	14,336	xxx
Gas from gas wells.....	do.....	509,750	xxx	380,678	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³	do.....	498,007	54,092	382,759	45,729
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	do.....	30,839	6,153	5,846	666
Used in lease operations:					
For power or heat.....	do.....	6,517	xxx	4,524	xxx
For gas lift (net).....	do.....	321	xxx	1,537	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	do.....	2,018	xxx	348	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	do.....				
Missouri and South Dakota					
Crude petroleum, total.....	1,000 barrels.....	121	xxx	(D)	xxx
Shipped.....	do.....	121	332	(D)	(D)
Natural gas gross production.....	Million cu. ft. ²	26	xxx	(D)	xxx
Used in lease operations for power or heat.....	do.....	7	xxx	13	xxx
SOUTH ATLANTIC					
Crude petroleum, total.....	1,000 barrels.....	2,496	xxx	3,225	xxx
Shipped.....	do.....	2,495	8,016	3,222	8,953
Used in lease operations:					
For power or heat.....	do.....	...	xxx	2	xxx
For other purposes, including losses.....	do.....	1	xxx	1	xxx
Field condensate and drips shipped.....	do.....	4	11	9	31
Natural gas gross production, total.....	Million cu. ft. ²	184,317	xxx	173,498	xxx
Gas from oil wells.....	do.....	6,974	xxx	5,856	xxx
Gas from gas wells.....	do.....	177,343	xxx	167,642	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³	do.....	141,394	31,739	130,728	33,564
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	do.....	34,960	8,849	36,430	13,002
Used in lease operations: ¹					
For power or heat.....	do.....	5,295	xxx	2,468	xxx
For gas lift (net).....	do.....	2,668	xxx	3,872	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage and vented to air, burned in flares, and other losses.....	do.....				

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
SOUTH ATLANTIC—Continued					
West Virginia					
Natural gas gross production.....	Million cu. ft. ²	177,305	xxx	170,667	xxx
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	...do.....	169,386	38,764	164,376	(D)
Maryland, Virginia, and Florida					
Natural gas gross production.....	...do.....	7,012	xxx	2,831	xxx
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	...do.....	6,968	1,824	2,782	(D)
EAST SOUTH CENTRAL					
Crude petroleum, total.....	1,000 barrels....	57,410	xxx	46,259	xxx
Shipped.....	...do.....	57,398	163,800	46,246	119,308
Used in lease operations:					
For power or heat.....	...do.....	5	xxx	1	xxx
For other purposes, including losses.....	...do.....	7	xxx	12	xxx
Field condensate and drips shipped.....	...do.....	1,968	5,620	783	2,331
Natural gas gross production, total.....	Million cu. ft. ²	295,839	xxx	274,362	xxx
Gas from oil wells.....	...do.....	68,353	xxx	56,432	xxx
Gas from gas wells.....	...do.....	227,486	xxx	217,930	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	212,044	37,345	199,987	30,403
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	6,912	1,369	4,822	858
Used in lease operations: ¹					
For power or heat.....	...do.....	8,827	xxx	8,699	xxx
For gas lift (net).....	...do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling; and vented to air, burned in flares, and other losses.....	...do.....	68,056	xxx	60,854	xxx
Kentucky					
Crude petroleum, total.....	1,000 barrels....	15,134	xxx	12,294	xxx
Shipped.....	...do.....	15,134	44,915	12,290	35,986
Used in lease operations.....	...do.....	...	xxx	4	xxx
Natural gas gross production, total.....	Million cu. ft. ²	72,648	xxx	73,512	xxx
Gas from oil wells.....	...do.....	806	xxx	2,298	xxx
Gas from gas wells.....	...do.....	71,842	xxx	71,214	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	66,687	15,598	67,553	18,296
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	3,410	668	1,361	507
Used in lease operations: ¹					
For power or heat.....	...do.....	1,346	xxx	2,332	xxx
For gas lift (net).....	...do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling; and vented to air, burned in flares, and other losses.....	...do.....	1,205	xxx	2,266	xxx
Tennessee					
Crude petroleum shipped.....	1,000 barrels....	5	14	13	46
Natural gas gross production.....	Million cu. ft. ²	163	xxx	94	xxx
Alabama					
Crude petroleum, total.....	1,000 barrels....	5,263	xxx	1,589	xxx
Shipped.....	...do.....	5,263	15,612	1,584	3,136
Used in lease operations (for purposes other than power or heat).....	...do.....	...	xxx	5	xxx
Natural gas gross production, total.....	Million cu. ft. ²	333	xxx	96	xxx
Used in lease operations for power or heat.....	...do.....	202	xxx	53	xxx
Vented to air, burned in flares, and other losses.....	...do.....	105	xxx	43	xxx

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
EAST SOUTH CENTRAL—Continued					
Mississippi					
Crude petroleum, total.....	1,000 barrels.....	37,008	xxx	32,363	xxx
Shipped.....	..do.....	36,996	103,259	32,359	80,140
Used in lease operations.....	..do.....	12	xxx	4	xxx
Field condensate and drips shipped.....	..do.....	1,960	5,595	779	2,317
Natural gas gross production, total.....	Million cu. ft. ²	222,695	xxx	200,660	xxx
Gas from oil wells.....	..do.....	67,224	xxx	54,038	xxx
Gas from gas wells.....	..do.....	155,471	xxx	146,622	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	145,319	21,744	132,402	12,103
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	3,351	596	3,399	344
Used in lease operations:					
For power or heat.....	..do.....	7,279	xxx	6,314	xxx
For gas lift (net).....	..do.....				
Returned to underground formations for repressuring, pressure maintenance, and cycling; and vented to air, burned in flares, and other losses.....	..do.....	66,746	xxx	58,545	xxx
WEST SOUTH CENTRAL					
Crude petroleum, total.....	1,000 barrels.....	1,402,917	xxx	1,341,645	xxx
Shipped.....	..do.....	1,402,186	4,289,818	1,341,067	3,810,027
Used in lease operations: ¹					
For power or heat.....	..do.....	202	xxx	234	xxx
For other purposes, including losses.....	..do.....	529	xxx	344	xxx
Field condensate and drips shipped.....	..do.....	44,347	136,001	23,912	72,166
Natural gas gross production, total.....	Million cu. ft. ²	9,132,423	xxx	7,638,090	xxx
Gas from oil wells.....	..do.....	2,588,085	xxx	2,447,401	xxx
Gas from gas wells.....	..do.....	6,544,338	xxx	5,190,689	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	7,220,314	844,394	5,799,397	541,554
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	472,849	55,431	259,842	25,927
Used in lease operations: ¹					
For power or heat.....	..do.....	226,074	xxx	229,798	xxx
For gas lift (net).....	..do.....	159,800	xxx	178,261	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	855,521	xxx	4901,378	xxx
Net change in underground storage.....	..do.....	3,675	xxx	3,756	xxx
Vented to air, burned in flares, and other losses.....	..do.....	194,190	xxx	265,658	xxx
Arkansas					
Crude petroleum, total.....	1,000 barrels.....	27,137	xxx	26,872	xxx
Shipped.....	..do.....	27,128	77,314	26,860	71,695
Used in lease operations.....	..do.....	9	xxx	12	xxx
Field condensate and drips shipped.....	..do.....	22	71	26	59
Natural gas gross production, total.....	Million cu. ft. ²	47,021	xxx	49,541	xxx
Gas from oil wells.....	..do.....	21,920	xxx	35,991	xxx
Gas from gas wells.....	..do.....	25,101	xxx	13,550	xxx
Disposition:					
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³					
Used in lease operations: ¹	..do.....	33,151	4,350	28,214	2,217
For power or heat.....	..do.....	2,092	xxx	1,282	xxx
For gas lift (net).....	..do.....	15	xxx	293	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	10,550	xxx	419,007	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	..do.....	1,213	xxx	745	xxx
Louisiana					
Crude petroleum, total.....	1,000 barrels.....	290,114	xxx	231,276	xxx
Shipped.....	..do.....	290,100	938,352	231,238	676,822
Used in lease operations.....	..do.....	14	xxx	38	xxx
Field condensate and drips shipped.....	..do.....	22,419	69,321	10,733	32,524
Natural gas gross production, total.....	Million cu. ft. ²	2,624,920	xxx	1,661,805	xxx
Gas from oil wells.....	..do.....	465,347	xxx	386,266	xxx
Gas from gas wells.....	..do.....	2,159,573	xxx	1,275,539	xxx
See footnotes at end of table.					

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
WEST SOUTH CENTRAL--Continued					
Louisiana--Continued					
Natural gas gross production--Continued					
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³	Million cu. ft. ² ...	2,116,068	303,289	1,233,974	131,079
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	111,886	13,881	78,858	7,285
Used in lease operations: ¹					
For power or heat.....	..do.....	59,954	xxx	68,532	xxx
For gas lift (net).....	..do.....	40,616	xxx	426,977	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	228,798	xxx	4204,382	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	..do.....	67,798	xxx	49,082	xxx
Oklahoma					
Crude petroleum, total.....	1,000 barrels.....	187,034	xxx	171,305	xxx
Shipped.....	..do.....	186,811	547,853	171,068	471,423
Used in lease operations:					
For power or heat.....	..do.....	69	xxx	153	xxx
For other purposes, including losses.....	..do.....	154	xxx	84	xxx
Field condensate and drips shipped.....	..do.....	1,083	3,185	208	599
Natural gas gross production, total.....	Million cu. ft. ² ...	801,017	xxx	787,468	xxx
Gas from oil wells.....	..do.....	441,939	xxx	423,295	xxx
Gas from gas wells.....	..do.....	359,078	xxx	364,173	xxx
Disposition:					
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	..do.....	645,366	58,672	583,469	52,713
Used in lease operations: ¹					
For power or heat.....	..do.....	29,820	xxx	36,956	xxx
For gas lift (net).....	..do.....	1,188	xxx	48,142	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	99,976	xxx	488,816	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	..do.....	24,667	xxx	70,085	xxx
Texas					
Crude petroleum, total.....	1,000 barrels.....	898,632	xxx	912,192	xxx
Shipped.....	..do.....	898,147	2,726,299	911,901	2,590,087
Used in lease operations: ¹					
For power or heat.....	..do.....	128	xxx	54	xxx
For other purposes, including losses.....	..do.....	357	xxx	237	xxx
Field condensate and drips shipped.....	..do.....	20,823	63,424	12,945	38,984
Natural gas gross production, total.....	Million cu. ft. ² ...	5,659,465	xxx	5,139,276	xxx
Gas from oil wells.....	..do.....	1,658,879	xxx	1,601,849	xxx
Gas from gas wells.....	..do.....	4,000,586	xxx	3,537,427	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	4,465,587	482,422	3,974,640	358,690
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	321,105	37,211	160,084	15,497
Used in lease operations: ¹					
For power or heat.....	..do.....	134,208	xxx	123,028	xxx
For gas lift (net).....	..do.....	117,981	xxx	4142,849	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	516,197	xxx	4589,173	xxx
Net change in underground storage.....	..do.....	3,675	xxx	3,740	xxx
Vented to air, burned in flares, and other losses.....	..do.....	100,712	xxx	145,762	xxx
See footnotes at end of table.					

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
MOUNTAIN					
Crude petroleum, total.....	1,000 barrels....	302,908	xxx	225,511	xxx
Shipped.....	..do.....	302,637	849,279	225,283	577,979
Used in lease operations: ¹					
For power or heat.....	..do.....	122	xxx	50	xxx
For other purposes, including losses.....	..do.....	149	xxx	178	xxx
Field condensate and drips shipped.....	..do.....	1,790	4,775	721	2,050
Natural gas gross production, total.....	Million cu. ft. ²	1,070,552	xxx	678,994	xxx
Gas from oil wells.....	..do.....	391,225	xxx	304,662	xxx
Gas from gas wells.....	..do.....	679,327	xxx	374,332	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	903,165	91,580	482,486	40,483
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	44,004	4,477	99,491	8,618
Used in lease operations: ¹					
For power or heat.....	..do.....	30,750	xxx	30,172	xxx
For gas lift (net).....	..do.....	2,634	xxx	410,781	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	56,240	xxx	425,224	xxx
Net change in underground storage.....	..do.....	569	xxx	1,325	xxx
Vented to air, burned in flares, and other losses.....	..do.....	33,190	xxx	29,515	xxx
Montana					
Crude petroleum, total.....	1,000 barrels....	28,415	xxx	13,810	xxx
Shipped.....	..do.....	28,350	75,457	13,771	30,446
Used in lease operations.....	..do.....	65	xxx	39	xxx
Natural gas gross production, total.....	Million cu. ft. ²	32,922	xxx	30,261	xxx
Gas from oil wells.....	..do.....	6,323	xxx	2,549	xxx
Gas from gas wells.....	..do.....	26,599	xxx	27,712	xxx
Disposition:					
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	..do.....	30,168	2,098	26,683	1,902
Used in lease operations: ¹					
For power or heat.....	..do.....	1,569	xxx	1,205	xxx
For gas lift (net).....	..do.....	100	xxx	439	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	..do.....	1,085	xxx	42,334	xxx
Wyoming					
Crude petroleum, total.....	1,000 barrels....	108,173	xxx	91,208	xxx
Shipped.....	..do.....	108,092	281,322	91,131	216,861
Used in lease operations.....	..do.....	81	xxx	77	xxx
Field condensate and drips shipped.....	..do.....	181	529	103	313
Natural gas gross production, total.....	Million cu. ft. ²	157,531	xxx	110,290	xxx
Gas from oil wells.....	..do.....	62,147	xxx	62,655	xxx
Gas from gas wells.....	..do.....	95,384	xxx	47,635	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	119,519	13,732	65,152	7,239
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	5,280	493	3,592	323
Used in lease operations: ¹					
For power or heat.....	..do.....	9,041	xxx	16,249	xxx
For gas lift (net).....	..do.....	1,790	xxx	42,303	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	13,121	xxx	48,813	xxx
Net change in underground storage and vented to air, burned in flares, and other losses.....	..do.....	8,780	xxx	14,181	xxx

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
MOUNTAIN--Continued					
Colorado					
Crude petroleum, total.....	1,000 barrels.....	48,111	xxx	44,719	xxx
Shipped.....	..do.....	48,106	143,028	44,667	123,851
Used in lease operations.....	..do.....	5	xxx	52	xxx
Field condensate and drips shipped.....	..do.....	51	131	(D)	(D)
Natural gas gross production, total.....	Million cu. ft. ² ..	132,767	xxx	66,593	xxx
Gas from oil wells.....	..do.....	77,710	xxx	37,535	xxx
Gas from gas wells.....	..do.....	55,057	xxx	29,058	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	72,401	10,605	32,473	3,284
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	6,317	1,058	8,223	894
Used in lease operations: ¹					
For power or heat.....	..do.....	7,970	xxx	5,367	xxx
For gas lift (net).....	..do.....	8	xxx	434	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling and vented to air, burned in flares, and other losses.....	..do.....	46,071	xxx	420,496	xxx
New Mexico					
Crude petroleum, total.....	1,000 barrels.....	93,791	xxx	73,832	xxx
Shipped.....	..do.....	93,710	277,610	73,774	202,257
Used in lease operations.....	..do.....	81	xxx	58	xxx
Field condensate and drips shipped.....	..do.....	1,549	4,082	572	1,602
Natural gas gross production, total.....	Million cu. ft. ² ..	718,516	xxx	455,154	xxx
Gas from oil wells.....	..do.....	233,739	xxx	201,515	xxx
Gas from gas wells.....	..do.....	484,777	xxx	253,639	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	..do.....	674,254	63,274	352,060	26,642
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	21,310	2,199	77,956	6,564
Used in lease operations: ¹					
For power or heat.....	..do.....	10,979	xxx	6,899	xxx
For gas lift (net).....	..do.....	736	xxx	48,405	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; vented to air, burned in flares, and other losses.....	..do.....	11,237	xxx	49,834	xxx
Utah, Arizona, and Nevada					
Crude petroleum, total.....	1,000 barrels.....	24,418	xxx	(D)	xxx
Shipped.....	..do.....	24,379	71,862	(D)	(D)
Used in lease operations.....	..do.....	39	xxx	2	xxx
Natural gas gross production, total.....	Million cu. ft. ² ..	28,816	xxx	16,696	xxx
Gas from oil wells.....	..do.....	11,306	xxx	408	xxx
Gas from gas wells.....	..do.....	17,510	xxx	16,288	xxx
Disposition:					
Delivered to distributors, transmission companies, and consumers and net deliveries to natural gas liquids plants ³.....	..do.....	17,920	2,598	15,838	2,253
Used in lease operations:					
For power or heat.....	..do.....	1,191	xxx	452	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling; and vented to air, burned in flares, and other losses.....	..do.....	9,705	xxx	406	xxx

See footnotes at end of table.

Table 3A.—PRIMARY PRODUCTS OF THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Unit of measure	1958		1954	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
PACIFIC (Washington and California)					
Crude petroleum, total.....	1,000 barrels.....	310,308	xxx	356,926	xxx
Shipped.....	...do.....	309,971	895,602	356,322	927,081
Used in lease operations: ¹					
For power or heat.....	...do.....	194	xxx	269	xxx
For other purposes, including losses.....	...do.....	143	xxx	335	xxx
Field condensate and drips shipped.....	...do.....	235	715	145	480
Natural gas gross production, total.....	Million cu. ft. ² ...	761,795	xxx	761,893	xxx
Gas from oil wells.....	...do.....	610,267	xxx	574,649	xxx
Gas from gas wells.....	...do.....	151,528	xxx	187,244	xxx
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants ³.....	...do.....	383,249	119,007	392,595	144,126
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	42,324	10,977	43,893	8,202
Used in lease operations: ¹					
For power or heat.....	...do.....	42,993	xxx	58,609	xxx
For gas lift (net).....	...do.....	66,087	xxx	427,548	xxx
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	208,709	xxx	4223,777	xxx
Net change in underground storage.....	...do.....	766	xxx	...	xxx
Vented to air, burned in flares, and other losses.....	...do.....	17,667	xxx	15,471	xxx

D Withheld to avoid approximately disclosing figures for individual companies.

xxx Not applicable.

¹For 1958, a short form was used for certain small reports. These provided only for the totals used in lease operations. Such combined figures reported on short forms were 50 thousand barrels of crude petroleum and 6,408 million cubic feet of gas for the United States as a whole. These figures were allocated between the two classes of uses on the basis of the allocation reported for such uses by all establishments in the State which reported such detail.

²Represents volumes adjusted to a pressure base of 14.73 pounds absolute at 60°F.

³Respondents were requested to include, besides the value of residue gas, the producers' realization from all products contained in the gas delivered to natural gas liquids plants.

⁴For 1954, separate figures for all gas used for gas lift and for repressuring were adjusted to exclude purchased gas by allocating purchases in proportion to total use for these purposes in each State. For the United States as a whole, 122,958 million cubic feet of gas was purchased for these purposes by the Crude Petroleum and Natural Gas Industry. Such purchases for the Oil and Gas Field Services Industries were for gas lift only and needed no allocation.

Table 3B.—NUMBER, FOOTAGE, AND COST OF DRILLING AND EQUIPPING OIL, GAS, DRY, AND SERVICE WELLS IN THE UNITED STATES: 1958, 1954, AND 1939; AND FOR GEOGRAPHIC DIVISIONS AND STATES: 1958

(Represents holes drilled and completed during the year by all operators of oil and gas field properties covered in the census whether they are classified in the Crude Petroleum and Natural Gas Industry or in the Oil and Gas Field Services Industries)

Item	United States, total			Middle Atlantic			East North Central				
	1958	1954	1939	Total	New York	Pennsylvania	Total	Ohio	Indiana	Illinois	Michigan
Number of wells drilled, total ⁶	46,954	52,327	22,560	1,019	346	673	4,723	964	895	2,424	440
Oil wells ⁷	23,754	28,879	17,263	495	244	251	2,104	489	312	1,153	150
Gas wells ⁷	4,526	3,885	1,594	242	10	232	298	233	13	10	42
Dry holes ⁸	16,351	16,422	3,703	117	31	86	1,897	227	519	937	214
Service wells ⁸	2,323	3,141	(NA)	165	61	104	424	15	51	324	34
Footage drilled, total.....1,000 feet..	193,626	210,801	72,191	2,629	695	1,934	10,585	2,429	1,489	5,487	1,180
Oil wells.....do..	92,663	117,897	55,837	835	450	385	4,941	1,233	558	2,720	430
Gas wells.....do..	24,584	18,510	4,439	1,045	19	1,026	794	653	7	16	118
Dry holes.....do..	72,837	70,213	11,915	486	131	355	4,284	535	867	2,297	585
Service wells.....do..	3,542	4,181	(NA)	263	95	168	566	8	57	454	47
Average footage drilled per well, all wells.....	4,124	4,029	3,200	2,580	2,007	2,874	2,241	2,519	1,664	2,264	2,684
Oil wells.....do..	3,901	4,082	3,234	1,688	1,846	1,533	2,349	2,521	1,790	2,359	2,870
Gas wells.....do..	5,431	4,764	2,785	4,315	1,850	4,422	2,660	2,801	504	1,560	2,806
Dry holes.....do..	4,455	4,276	3,218	4,155	4,213	4,133	2,259	2,356	1,671	2,451	2,736
Service wells.....do..	1,524	1,331	(NA)	1,592	1,552	1,616	1,337	532	1,118	1,403	1,392
Cost of drilling and equipping wells, total ¹⁰.....\$1,000..	2,424,798	2,306,947	404,904	18,005	3,373	14,632	71,896	17,406	8,884	35,874	9,732
Per well.....do..	51.6	44.1	17.9	17.7	9.7	21.7	15.2	18.1	9.9	14.8	22.1
Per foot.....do..	12.52	10.94	5.61	6.85	4.86	7.56	6.79	7.17	5.96	6.54	8.24
Oil wells.....\$1,000..	1,310,523	1,449,654	330,547	2,456	1,309	1,147	44,209	10,771	4,992	23,913	4,533
Per well.....do..	55.2	50.2	19.1	5.0	5.4	4.6	21.0	22.0	16.0	20.7	30.2
Per foot.....do..	14.14	12.30	5.92	2.94	2.91	2.98	8.95	8.74	8.94	8.79	10.53
Gas wells.....\$1,000..	440,833	263,619	20,926	10,515	296	10,219	5,570	4,477	45	104	944
Per well.....do..	97.4	67.9	13.1	43.5	29.6	44.0	18.7	19.2	3.5	10.4	22.5
Per foot.....do..	17.93	14.24	4.71	10.07	16.00	9.96	7.03	6.86	6.87	6.67	8.01
Dry holes.....\$1,000..	649,342	565,745	53,431	4,345	1,476	2,869	17,847	2,131	3,420	8,753	3,543
Per well.....do..	39.7	34.5	14.4	37.1	47.6	33.4	9.4	9.4	6.6	9.3	16.6
Per foot.....do..	8.91	8.06	4.48	8.94	11.30	8.07	4.17	3.98	3.94	3.81	6.05
Service wells.....\$1,000..	24,100	27,929	(NA)	689	292	397	4,270	27	427	3,104	712
Per well.....do..	10.4	8.9	(NA)	4.2	4.8	3.8	10.1	1.8	8.4	9.6	20.9
Per foot.....do..	6.81	6.68	(NA)	2.62	3.09	2.36	7.53	3.38	7.49	6.83	15.04
Cost, excluding amount paid or due contractors, total.....\$1,000..	1,419,729	1,307,142	256,923	7,544	1,189	6,355	40,729	9,392	4,942	21,961	4,434
Oil wells.....do..	837,837	882,471	213,807	1,343	760	583	29,411	6,471	3,503	16,800	2,637
Gas wells.....do..	271,357	158,102	12,366	4,861	67	4,794	2,656	2,170	20	64	402
Dry holes.....do..	297,376	251,697	30,750	1,015	212	803	6,289	735	1,210	3,185	1,159
Service wells.....do..	13,159	14,872	(NA)	325	150	175	2,373	16	209	1,912	236
Cost of drilling, total ¹².....do..	733,444	702,346	131,718	3,245	439	2,806	14,548	2,067	2,119	8,877	1,485
Oil wells.....do..	342,629	387,299	98,228	436	210	226	7,692	1,123	918	5,019	632
Gas wells.....do..	139,973	90,510	6,344	1,817	26	1,791	489	427	2	24	36
Dry holes.....do..	245,331	217,793	27,146	905	159	746	5,203	514	1,088	2,792	809
Service wells.....do..	5,511	6,744	(NA)	87	44	43	1,164	3	111	1,042	8
Cost of casing, total ¹³.....do..	384,487	344,683	75,317	2,686	483	2,203	12,074	3,893	1,149	5,253	1,779
Oil wells.....do..	244,930	263,011	67,730	512	350	162	8,833	2,659	970	4,290	914
Gas wells.....do..	86,436	46,485	4,347	1,947	19	1,928	1,522	1,164	9	21	328
Dry holes.....do..	48,276	30,419	3,240	85	35	50	824	69	105	321	329
Service wells.....do..	4,845	4,768	(NA)	142	79	63	895	1	65	621	208
Cost of equipment for flowing and pumping and production derrick, total ¹⁴.....do..	301,798	260,113	49,888	1,613	267	1,346	14,107	3,432	1,674	7,831	1,170
Oil wells.....do..	250,278	232,161	47,849	395	200	195	12,886	2,689	1,615	7,491	1,091
Gas wells.....do..	44,948	21,107	1,675	1,097	22	1,075	645	579	9	19	38
Dry holes.....do..	3,769	3,485	364	25	18	7	262	152	17	72	21
Service wells.....do..	2,803	3,360	(NA)	96	27	69	314	12	33	249	20
Amount paid or due contractors for drilling and equipping wells, total.....do..	1,005,069	999,805	147,981	10,461	2,184	8,277	31,167	8,014	3,942	13,913	5,298
Oil wells.....do..	472,686	567,183	116,740	1,113	549	564	14,798	4,300	1,489	7,113	1,896
Gas wells.....do..	169,476	105,517	8,560	5,654	229	5,425	2,914	2,307	25	40	542
Dry holes.....do..	351,966	314,048	22,681	3,330	1,264	2,066	11,558	1,396	2,210	5,568	2,384
Service wells.....do..	10,941	13,057	(NA)	364	142	222	1,897	11	218	1,192	476

See footnotes at end of table.

Table 3B.—NUMBER, FOOTAGE, AND COST OF DRILLING AND EQUIPPING OIL, GAS, DRY, AND SERVICE WELLS IN THE UNITED STATES: 1958, 1954, AND 1939; AND FOR GEOGRAPHIC DIVISIONS AND STATES: 1958—Continued

Item	West North Central					South Atlantic			East South Central			
	Total	North Dakota	Nebraska	Kansas	Missouri and South Dakota ¹	Total	West Virginia	Maryland, Virginia, Georgia, and Florida ²	Total	Kentucky	Mississippi	Tennessee and Alabama ³
Number of wells drilled, total ⁶	5,563	416	695	4,429	23	757	730	27	2,465	1,961	406	98
Oil wells ⁷	2,647	249	202	2,193	3	115	115	...	1,131	913	171	47
Gas wells ⁷	297	...	3	253	1	512	494	18	208	190	15	3
Dry holes ⁸	2,398	162	482	1,735	19	130	121	9	777	514	215	48
Service wells ⁸	261	5	8	248	...	...	...	...	349	344	5	...
Footage drilled, total....1,000 feet..	20,217	2,675	3,940	13,542	60	2,238	2,077	161	6,830	2,588	3,628	614
Oil wells.....do..	8,949	1,679	⁹ 1,193	6,077	(⁹)	240	240	...	3,041	928	1,637	476
Gas wells.....do..	1,041	...	⁹ 14	1,027	(⁹)	1,557	1,468	89	766	647	117	2
Dry holes.....do..	9,822	975	⁹ 2,758	5,089	(⁹)	441	369	72	2,744	747	1,861	136
Service wells.....do..	405	21	35	349	...	...	...	...	279	266	13	...
Average footage drilled per well, all wells.....	3,634	6,431	5,668	3,057	2,621	2,957	2,846	5,953	2,770	1,319	8,936	6,262
Oil wells.....do..	3,381	6,744	⁹ 5,818	2,771	(⁹)	2,087	2,087	xxx	2,688	1,016	9,574	10,120
Gas wells.....do..	4,052	xxx	⁹ 3,634	4,059	(⁹)	3,041	2,972	4,950	3,681	3,406	7,775	617
Dry holes.....do..	4,096	6,019	⁹ 5,505	3,509	(⁹)	3,393	3,053	7,959	3,531	1,453	8,656	2,837
Service wells.....do..	1,548	4,176	4,314	1,406	xxx	xxx	xxx	xxx	798	772	2,615	xxx
Cost of drilling and equipping wells, total ¹⁰....\$1,000..	157,267	40,189	21,131	95,415	532	25,701	23,132	2,569	70,715	18,706	44,877	7,132
Per well.....do..	28.3	96.6	30.4	21.5	23.1	34.0	31.7	95.1	28.7	9.5	110.5	72.8
Per foot.....do..	7.78	15.02	5.36	7.05	8.82	11.48	11.14	15.98	10.36	7.23	12.37	11.62
Oil wells.....do..	99,862	30,447	⁹ 11,830	57,585	(⁹)	2,039	2,039	...	36,802	7,468	22,923	6,411
Per well.....do..	37.7	122.3	⁹ 58.6	26.3	(⁹)	17.7	17.7	xxx	32.5	8.2	134.1	136.4
Per foot.....do..	11.16	18.13	⁹ 9.92	9.48	(⁹)	8.49	8.49	xxx	12.10	8.05	14.00	13.48
Gas wells.....do..	10,519	...	⁹ 99	10,420	(⁹)	17,780	16,733	1,047	8,217	6,081	2,129	7
Per well.....do..	40.9	xxx	⁹ 24.8	41.2	(⁹)	34.7	33.9	58.2	39.5	32.0	141.9	2.3
Per foot.....do..	10.10	xxx	⁹ 6.81	10.15	(⁹)	11.42	11.40	11.75	10.73	9.40	18.26	3.78
Dry holes.....do..	44,202	9,394	⁹ 9,534	25,274	(⁹)	5,882	4,360	1,522	24,089	3,632	19,743	714
Per well.....do..	18.4	58.0	⁹ 19.0	14.6	(⁹)	45.2	36.0	169.1	31.0	31.0	91.8	14.9
Per foot.....do..	4.50	9.63	⁹ 3.46	4.15	(⁹)	13.34	11.80	21.25	8.78	4.86	10.61	5.24
Service wells.....do..	2,684	348	200	2,136	...	...	...	...	1,607	1,525	82	...
Per well.....do..	10.3	69.6	25.0	8.6	xxx	xxx	xxx	xxx	4.6	4.4	16.4	xxx
Per foot.....do..	6.64	16.67	5.80	6.13	xxx	xxx	xxx	xxx	5.77	5.74	6.27	xxx
Cost, excluding amount paid or due contractors, total.....\$1,000..	95,836	24,037	10,982	60,543	274	14,452	13,360	1,092	39,606	11,523	22,610	5,473
Oil wells.....do..	68,686	19,716	⁹ 8,235	40,735	(⁹)	1,090	1,090	...	24,293	5,320	13,702	5,271
Gas wells.....do..	6,171	...	⁹ 73	6,098	(⁹)	10,523	10,127	396	4,914	3,667	1,244	3
Dry holes.....do..	19,218	4,078	⁹ 2,797	12,343	(⁹)	2,839	2,143	696	9,500	1,695	7,606	199
Service wells.....do..	1,761	243	⁹ 151	1,367	...	...	...	...	899	841	58	...
Cost of drilling, total ¹²....do..	42,106	11,965	4,513	25,447	181	5,639	4,993	646	18,401	4,045	11,411	2,945
Oil wells.....do..	21,754	8,323	⁹ 2,171	11,260	(⁹)	185	185	...	9,251	1,579	4,904	2,748
Gas wells.....do..	2,850	...	⁹ 42	2,808	(⁹)	3,261	3,244	17	1,480	796	681	3
Dry holes.....do..	16,734	3,487	⁹ 2,401	10,846	(⁹)	2,193	1,564	629	7,246	1,253	5,799	194
Service wells.....do..	768	155	⁹ 80	533	...	...	...	...	444	417	27	...
Cost of casing, total ¹³.....do..	23,282	5,620	2,580	15,040	42	6,282	5,922	360	11,917	3,887	6,801	1,229
Oil wells.....do..	18,400	4,976	⁹ 2,167	11,257	(⁹)	464	464	...	7,316	1,405	4,687	1,224
Gas wells.....do..	2,051	...	⁹ 25	2,026	(⁹)	5,178	4,883	295	2,163	1,825	338	...
Dry holes.....do..	2,286	557	⁹ 396	1,333	(⁹)	640	575	65	2,193	428	1,760	5
Service wells.....do..	545	87	⁹ 34	424	...	...	...	...	245	229	16	...
Cost of equipment for flowing and pumping and production derrick, total ¹⁴.....do..	30,448	6,452	3,889	20,056	51	2,531	2,445	86	9,288	3,591	4,398	1,299
Oil wells.....do..	28,532	6,417	⁹ 3,897	18,218	(⁹)	441	441	...	7,746	2,336	4,111	1,299
Gas wells.....do..	1,270	...	⁹ 6	1,264	(⁹)	2,084	2,000	84	1,271	1,046	225	...
Dry holes.....do..	198	34	...	164	...	6	4	2	61	14	47	...
Service wells.....do..	448	1	⁹ 37	410	...	...	...	...	210	195	15	...
Amount paid or due contractors for drilling and equipping wells, total.....do..	61,431	16,152	10,149	34,872	258	11,249	9,772	1,477	31,109	7,183	22,267	1,659
Oil wells.....do..	31,176	10,731	⁹ 3,595	16,850	(⁹)	949	949	...	12,509	2,148	9,221	1,140
Gas wells.....do..	4,348	...	⁹ 26	4,322	(⁹)	7,257	6,606	651	3,303	2,414	885	4
Dry holes.....do..	24,984	5,316	⁹ 6,737	12,931	(⁹)	3,043	2,217	826	14,589	1,937	12,137	515
Service wells.....do..	923	105	⁹ 49	769	...	...	...	...	708	684	24	...

See footnotes at end of table.

Table 3B.—NUMBER, FOOTAGE, AND COST OF DRILLING AND EQUIPPING OIL, GAS, DRY, AND SERVICE WELLS IN THE UNITED STATES: 1958, 1954, AND 1939; AND FOR GEOGRAPHIC DIVISIONS AND STATES: 1958—Continued

Item	West South Central					Mountain						Idaho, Arizona, and Utah ⁴	Pacific ⁵
	Total	Arkansas	Louisiana	Oklahoma	Texas	Total	Montana	Wyoming	Colorado	New Mexico			
Number of wells drilled, total ⁶	26,926	755	3,297	6,095	16,779	4,089	324	706	830	1,846	383	1,412	
Oil wells ⁷	14,470	422	1,631	3,114	9,303	1,879	156	320	158	994	251	913	
Gas wells ⁷	2,309	32	449	402	1,426	659	6	66	74	499	14	41	
Dry holes ⁸	9,074	296	1,205	1,987	5,586	1,538	161	316	592	351	118	420	
Service wells ⁸	1,073	5	12	592	464	13	1	4	6	2	...	38	
Footage drilled, total....1,000 feet..	122,985	2,627	27,970	20,281	72,107	21,108	1,820	3,726	4,322	9,094	2,146	7,034	
Oil wells.....do.....	60,966	1,305	12,483	9,498	37,680	9,507	943	1,533	835	4,761	1,435	4,184	
Gas wells.....do.....	15,712	164	4,553	2,402	8,593	3,445	37	446	392	2,502	68	224	
Dry holes.....do.....	44,410	1,149	10,885	7,483	24,893	8,119	840	1,747	3,072	1,831	643	2,531	
Service wells.....do.....	1,897	9	49	898	941	37			23		...	95	
Average footage drilled per well, all wells.....	4,568	3,481	8,484	3,327	4,297	5,162	5,618	5,276	5,208	4,926	5,604	4,982	
Oil wells.....do.....	4,213	3,093	7,654	3,050	4,050	5,060	6,047	4,790	5,285	4,790	5,719	4,583	
Gas wells.....do.....	6,804	5,135	10,140	5,974	6,026	5,226	6,148	6,753	5,300	5,013	4,823	5,465	
Dry holes.....do.....	4,894	3,883	9,033	3,766	4,456	5,280		5,186	5,190	5,187	5,453	6,027	
Service wells.....do.....	1,768	1,796	4,101	1,517	2,027	2,786		5,186	3,807		xxx	2,494	
Cost of drilling and equipping wells, total ¹⁰.....\$1,000..	1,656,506	21,110	675,789	199,057	760,550	301,495	26,666	55,192	33,079	138,939	47,619	123,213	
Per well.....do.....	61.5	28.0	205.0	32.7	45.3	73.7	82.3	78.2	39.9	75.3	124.3	87.3	
Per foot.....do.....	13.47	8.03	24.16	9.82	10.55	14.28	14.65	14.82	7.65	15.28	22.18	17.52	
Oil wells.....do.....\$1,000..	886,925	10,400	316,335	102,116	458,074	154,800	16,296	24,682	9,448	71,073	33,301	83,430	
Per well.....do.....	61.3	24.6	194.0	32.8	49.2	82.4	104.5	77.1	59.8	71.5	132.7	91.4	
Per foot.....do.....	14.55	7.97	25.34	10.75	12.16	16.28	17.27	16.10	11.31	14.93	23.20	19.94	
Gas wells.....do.....\$1,000..	318,569	3,762	151,442	38,341	125,024	66,393	1,115	10,639	6,620	46,087	1,932	3,270	
Per well.....do.....	138.0	117.6	337.3	95.4	87.7	100.7	185.8	161.2	89.5	92.4	138.0	79.8	
Per foot.....do.....	20.28	22.89	33.26	15.97	14.55	19.28	30.23	23.87	16.88	18.42	28.61	14.60	
Dry holes.....do.....\$1,000..	438,604	6,847	207,216	53,775	170,766	80,012	119,255	119,871	16,843	112,779	12,386	34,361	
Per well.....do.....	48.3	23.1	172.0	27.1	30.6	52.0	117.1	116.2	28.5	116.7	105.0	81.8	
Per foot.....do.....	9.88	5.96	19.04	7.19	6.86	9.85	11.01	11.38	5.48	11.89	19.25	13.58	
Service wells.....do.....\$1,000..	12,408	101	796	4,825	6,686	290	(11)	(11)	168	(11)	...	2,152	
Per well.....do.....	11.6	20.2	66.3	8.2	14.4	22.3	(11)	(11)	28.0	(11)	xxx	56.6	
Per foot.....do.....	6.54	11.25	16.18	5.37	7.11	8.01	(11)	(11)	7.35	(11)	xxx	22.71	
Cost, excluding amount paid or due contractors, total.....\$1,000..	995,368	12,173	451,490	108,159	423,546	151,751	13,915	29,298	15,392	67,602	25,544	74,443	
Oil wells.....do.....	567,344	7,230	224,477	62,219	273,418	88,630	10,296	15,121	5,762	38,302	19,149	57,040	
Gas wells.....do.....	207,827	2,059	105,521	22,925	77,322	32,443	544	5,952	3,818	21,074	1,055	1,962	
Dry holes.....do.....	213,709	2,818	121,029	20,525	69,337	30,567	3,075	5,754	8,225	5,754	5,340	14,239	
Service wells.....do.....	6,488	66	463	2,490	3,469	111	...	8,225	58	8,226	...	1,202	
Cost of drilling, total ¹².....do.....	529,745	6,176	282,527	49,756	191,286	76,318	7,090	16,397	8,929	29,013	14,889	43,442	
Oil wells.....do.....	239,488	2,242	119,304	20,116	97,826	34,717	4,119	5,884	1,630	13,855	9,229	29,126	
Gas wells.....do.....	113,538	1,407	63,964	11,105	37,062	15,581	396	3,412	2,283	8,733	757	957	
Dry holes.....do.....	174,322	2,507	99,074	17,473	55,268	25,977	2,575	7,101	5,000	6,425	4,903	12,751	
Service wells.....do.....	2,397	20	185	1,062	1,130	43	...	7,101	16	...	...	608
Cost of casing, total ¹³.....do.....	269,877	2,965	105,111	30,909	130,892	39,452	2,891	5,942	3,288	23,062	4,269	18,917	
Oil wells.....do.....	169,390	2,240	56,369	19,601	91,180	23,594	2,405	3,410	1,550	12,617	3,612	16,421	
Gas wells.....do.....	61,229	394	27,904	7,708	25,223	11,689	88	1,500	993	8,880	228	657	
Dry holes.....do.....	36,741	302	20,652	2,729	13,058	4,117	398	1,032	709	1,565	429	1,390	
Service wells.....do.....	2,517	29	186	871	1,431	52	...	1,032	36	...	...	449
Cost of equipment for flowing and pumping and production derrick, total ¹⁴.....do.....	195,746	3,032	63,852	27,494	101,368	35,981	3,934	6,959	3,175	15,527	6,386	12,084	
Oil wells.....do.....	158,466	2,748	48,804	22,502	84,412	30,319	3,772	5,827	2,582	11,830	6,308	11,493	
Gas wells.....do.....	33,060	258	13,653	4,112	15,037	5,173	60	1,040	542	3,461	70	348	
Dry holes.....do.....	2,646	9	1,303	323	1,011	473	102	92	45	236	8	98	
Service wells.....do.....	1,574	17	92	557	908	16	...	...	6	...	...	145
Amount paid or due contractors for drilling and equipping wells, total.....do.....	661,138	8,937	224,299	90,898	337,004	149,744	12,751	25,894	17,687	71,337	22,075	48,770	
Oil wells.....do.....	319,581	3,170	91,858	39,897	184,656	66,170	6,000	9,561	3,686	32,771	14,152	26,390	
Gas wells.....do.....	110,742	1,703	45,921	15,416	47,702	33,950	571	4,687	2,802	25,013	877	1,308	
Dry holes.....do.....	224,895	4,029	86,187	33,250	101,429	49,445	6,180	11,646	11,089	13,553	7,046	20,122	
Service wells.....do.....	5,920	35	333	2,335	3,217	179			110		...	950	

NA Not available. xxx Not applicable. ¹Represents 1 oil well, 1 gas well, and 8 dry holes in Missouri; and 2 oil wells and 11 dry holes in South Dakota. ²Represents 3 gas wells in Maryland; 15 gas wells and 1 dry hole in Virginia; 1 dry hole in Georgia; and 7 dry holes in Florida.

³Represents 1 oil well, 3 gas wells, and 18 dry holes in Tennessee; and 46 oil wells and 30 dry holes in Alabama. ⁴Represents Utah; 1 dry hole in Idaho; and 1 oil well and 11 dry holes in Arizona. ⁵Represents California and 5 dry holes in Washington and 5 dry holes in Oregon. ⁶Represents wells drilled which were completed during the year, wells completed during the year although begun in the previous year, and wells drilled and abandoned before completion during the year.

⁷For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product. They were requested to classify "distillate" wells as oil wells if the value of all liquids produced was greater than the value of gas produced; but otherwise to classify them as gas wells. ⁸Dry holes represent wells drilled and abandoned without commercial production during the year. Service wells include gas-injection, water-injection, and brine-disposal wells. The distinction between dry holes and service wells was not made uniformly by all respondents; hence the combined figures for dry holes and service wells in a State are somewhat more significant than the separate figures for each class. ⁹Figures for Missouri and South Dakota are included with those for Nebraska. ¹⁰Represents only the tangible costs specified; respondents were asked to exclude taxes, interest on investment, overhead costs, etc. ¹¹Figures for service wells are included with those for dry holes. ¹²Represents the cost of labor, supplies, water, fuel, and power used in such operations as: moving on to location all equipment and supplies incidental to operations; excavating for and building derrick foundation; digging slush pits; erecting and wiring derricks; building loading and pipe racks; laying fuel and water lines; rigging up; drilling hole; making straight-hole tests or surveys; coring; well logging and core analysis; testing formations; mud conditioning; reaming; running casing, screen, and liner; cleaning out, bailing, and swabbing; fishing; repairing and maintaining rig and derrick; tearing down rig; dismantling derrick and racks; and moving equipment off location. It includes tool charges and rentals, but excludes the value of material salvaged after use and the cost of the drilling derrick if it was left over well for production after completion.

¹³Includes the cost of delivering and installing equipment. Excludes the value of equipment that was salvaged and used again but includes the cost of salvaging. ¹⁴See footnote 13. Includes tubing, wellhead fittings, gas traps, flow tanks, etc., drilling derricks retained over well after completion, and special-production derricks.

Table 30.—NUMBER OF OIL AND GAS WELLS PRODUCING AND SHUT-IN, BY DIVISIONS AND STATES: 1958 AND 1954

(Represents producing and shut-in wells in December as reported by all operators of oil and gas field properties covered in the census whether they are classified in the Crude Petroleum and Natural Gas Industry or in the Oil and Gas Field Services Industries)

Division and State	Number of wells in December 1958				Number of wells in December 1954			
	Oil wells ¹		Gas wells ¹		Oil wells ¹		Gas wells ¹	
	Producing	Shut-in	Producing	Shut-in	Producing	Shut-in	Producing	Shut-in
United States, total.....	473,166	38,831	75,276	7,958	426,703	30,287	66,908	6,317
Middle Atlantic, total.....	59,825	6,324	17,113	711	65,794	6,884	17,632	1,038
New York.....	12,854	876	974	5	15,676	993	1,223	28
Pennsylvania.....	46,971	5,448	16,139	706	50,118	5,891	16,409	1,010
East North Central, total.....	42,701	3,388	4,788	138	42,295	2,300	5,061	150
Ohio.....	8,634	378	4,423	91	8,996	470	4,567	77
Indiana.....	4,217	181	144	5	3,556	73	235	15
Illinois.....	26,277	2,739	37	17	25,800	1,679	14	17
Michigan.....	3,573	90	184	25	3,943	78	245	41
West North Central, total.....	39,980	1,919	5,255	268	34,862	1,934	4,307	259
Missouri.....	125	...	3	...	99	6	2	...
North Dakota.....	1,157	68	10	...	445	7	27	...
South Dakota.....	4	1	...	...	2	...	2	...
Nebraska.....	1,196	95	55	7	514	19	45	24
Kansas.....	37,498	1,755	5,187	261	33,802	1,902	4,231	235
South Atlantic, total.....	9,281	589	14,359	524	9,304	527	14,302	499
Maryland.....	...	...	35	1	...	...	26	3
Virginia.....	5	...	80	56	9	3	38	54
West Virginia.....	9,265	589	14,244	467	9,282	523	14,238	439
Georgia.....	...	...	...	...	...	...	...	3
Florida.....	11	...	...	...	13	1	...	...
East South Central, total.....	17,214	513	4,295	281	15,071	878	4,294	286
Kentucky.....	15,057	325	3,998	232	13,301	731	4,055	224
Tennessee.....	7	...	19	1	24	2	20	1
Alabama.....	247	3	1	...	101	4	...	...
Mississippi.....	1,903	185	277	48	1,645	141	219	61
West South Central, total.....	246,506	16,989	22,429	5,161	209,234	10,915	17,514	3,368
Arkansas.....	4,354	328	231	70	3,455	217	226	52
Louisiana.....	17,881	1,740	4,801	1,278	13,701	1,263	3,796	784
Oklahoma.....	60,854	6,104	4,009	844	55,517	3,697	3,396	507
Texas.....	163,417	8,817	13,388	2,969	136,561	5,738	10,096	2,025
Mountain, total.....	22,915	2,527	6,448	711	18,107	1,678	3,220	574
Montana.....	3,538	293	1,154	54	3,314	332	1,097	153
Wyoming.....	6,202	1,377	299	178	5,720	979	162	89
Colorado.....	2,084	337	325	142	1,636	82	129	91
New Mexico.....	10,544	481	4,627	302	7,362	259	1,807	232
Arizona.....	1	1	2	7	...	...	...	1
Utah.....	544	37	41	28	74	26	25	8
Nevada.....	2	1	...	...	1	...	...	...
Pacific, total.....	34,744	6,582	589	164	32,036	5,171	578	143
Washington.....	1	...	...	...	...	...	...	1
California.....	34,743	6,582	589	164	32,036	5,171	578	142

¹For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product. They were requested to classify "distillate" wells as oil wells if the value of all liquids produced was greater than the value of gas produced; but otherwise to classify them as gas wells.

1958

Census of
Mineral
Industries

Industry and Product Reports

(Subject to Revision)

December 1959

MIC(P)-13B-2

OFFSHORE OIL AND GAS

(Special Report)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of crude petroleum from offshore operations were 58 million barrels, an increase of 104 percent from 1954, and production of offshore gas amounted to 231 billion cubic feet, an increase of 197 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. The cost of drilling and equipping offshore wells completed in 1958 was \$183 million, an increase of 168 percent from 1954. The footage drilled increased between 1954 and 1958 by 80 percent to a total footage of 3,993 thousand in 1958. The average footage drilled per well increased for the same period from 8,940 to 9,644 and the average cost per well for drilling and equipping from \$276 thousand to \$442 thousand.

For Census purposes, an offshore well is defined as one which is bottomed at, or produces from, a point which lies seaward from the normal or ordinary coast line. The term does not apply to wells drilled to and producing from points underlying inland waters. This classification differs somewhat from classifications sometimes used which include all wells located in blocks in which the predominant completions are offshore or which are accorded offshore allowables in a particular year. Such statistics include some inshore wells.

More detailed figures for offshore oil and gas operations, including offshore employment, will appear in the final report for the

crude petroleum and natural gas industry, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Preliminary and final reports for this and other industries will be issued during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. (Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.)

BACKGROUND

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The canvass included the continental United States, Alaska, and Hawaii.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight. Thus, the next Census will be conducted in 1964 covering mining activity in 1963.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

1958 CENSUS OF MINERAL INDUSTRIES

OFFSHORE OPERATIONS, NUMBER OF WELLS; PRODUCTION; AND NUMBER, FOOTAGE, AND COSTS OF DRILLING AND EQUIPPING OIL AND GAS WELLS
AND DRY HOLES; BY GEOGRAPHIC DIVISIONS AND STATES: 1958 AND 1954

Item	Unit of quantity	United States, total		South Central				Pacific (California)	
		1958	1954	Louisiana ¹		Texas		1958	1954
				1958	1954	1958	1954		
Number of establishments operating producing wells or drilling wells for own account.....	Number.....	41	25	25	12	10	7	6	6
Number of wells producing during December 1958, total ².....	..do.....	1,705	(NA)	920	(NA)	31	(NA)	754	(NA)
Oil wells.....	..do.....	1,599	(NA)	831	(NA)	14	(NA)	754	(NA)
Gas wells.....	..do.....	106	(NA)	89	(NA)	17	(NA)	...	(NA)
Crude petroleum shipped and used in lease operations ³	1,000 bbls....	58,487	28,727	39,172	10,954	411	516	18,904	17,257
Natural gas produced, total.....	Million cu. ft.	230,622	77,759	197,689	64,274	(D)	(D)	(D)	(D)
From oil wells.....	..do.....	72,552	21,655	(D)	8,170	(D)	(D)	(D)	(D)
From gas wells.....	..do.....	158,070	56,104	(D)	56,104	(D)	...	...	...
Number of wells drilled, total.....	Number.....	414	248	357	154	16	30	41	64
Oil wells, total ².....	..do.....	243	184	206	103	...	18	37	65
Drilled on contract.....	..do.....	210	100	187	76	...	2	23	22
Drilled by own company.....	..do.....	33	84	19	27	...	16	14	41
Gas wells, total ².....	..do.....	64	28	60	25	4	3	...	...
Drilled on contract.....	..do.....	41	15	37	13	4	2	...	...
Drilled by own company.....	..do.....	23	13	23	12	...	1	...	...
Dry holes, total ⁴.....	..do.....	107	36	91	26	12	9	4	1
Drilled on contract ⁴.....	..do.....	86	25	72	21	12	3	2	1
Drilled by own company.....	..do.....	21	11	19	5	...	6	2	...
Footage drilled, total.....	1,000 ft.....	3,993	2,217	3,673	1,497	149	251	171	469
Oil wells.....	..do.....	2,146	1,529	(D)	925	...	(D)	(D)	(D)
Gas wells.....	..do.....	726	309	683	285	43	24	...	...
Dry holes ⁴.....	..do.....	1,121	379	(D)	287	106	(D)	(D)	(D)
Average footage drilled per well, all wells.....	.....	9,644	8,940	10,289	9,721	9,313	8,367	4,165	7,328
Oil wells.....	.....	8,832	8,310	(D)	8,981	...	(D)	(D)	(D)
Gas wells.....	.....	11,336	11,036	11,379	11,400	10,687	8,000	...	...
Dry holes ⁴.....	.....	10,478	10,528	(D)	11,038	8,855	(D)	(D)	(D)
Cost of drilling and equipping wells, total ⁵	\$1,000.....	185,091	68,385	171,874	52,898	6,335	7,787	4,882	7,700
Per well.....	..do.....	442.2	275.7	481.4	343.5	395.9	259.6	119.1	120.3
Per foot.....	\$1.....	45.86	30.85	46.79	35.34	42.52	31.02	28.59	16.42
Oil wells.....	\$1,000.....	94,633	36,598	(D)	25,864	...	(D)	(D)	(D)
Per well.....	..do.....	389.4	198.9	(D)	251.1	...	(D)	(D)	(D)
Per foot.....	\$1.....	44.09	25.94	(D)	27.96	...	(D)	(D)	(D)
Gas wells.....	\$1,000.....	43,338	16,749	41,118	15,881	2,220	868	...	...
Per well.....	..do.....	677.2	598.2	685.3	635.2	555.0	289.3	...	...
Per foot.....	\$1.....	59.74	54.20	60.23	55.72	51.93	36.17	...	...
Dry holes ⁴	\$1,000.....	45,120	15,038	(D)	11,153	4,115	(D)	(D)	(D)
Per well.....	..do.....	421.7	417.7	(D)	429.0	342.9	(D)	(D)	(D)
Per foot.....	\$1.....	40.24	39.68	(D)	38.86	38.73	(D)	(D)	(D)
Cost excluding amount paid contractors, total.....	\$1,000.....	121,969	51,890	116,280	39,611	2,359	5,575	3,330	6,704
Oil wells.....	..do.....	65,308	27,532	(D)	18,709	...	(D)	(D)	(D)
Gas wells.....	..do.....	28,702	13,237	27,745	12,894	957	343	...	...
Dry holes ⁴.....	..do.....	27,959	11,121	(D)	8,008	1,402	(D)	(D)	(D)
Cost of drilling, total ⁶.....	..do.....	85,830	39,592	82,216	30,771	1,609	4,572	2,005	4,249
Oil wells.....	..do.....	40,556	18,283	(D)	12,573	...	(D)	(D)	(D)
Gas wells.....	..do.....	20,717	11,293	20,168	11,042	549	251	...	...
Dry holes ⁴.....	..do.....	24,557	10,016	(D)	7,156	1,060	(D)	(D)	(D)
Cost of casing, total ⁷.....	..do.....	21,066	8,545	19,597	6,084	598	628	871	1,833
Oil wells.....	..do.....	12,638	6,238	(D)	4,001	...	(D)	(D)	(D)
Gas wells.....	..do.....	5,505	1,430	5,249	1,361	256	69	...	...
Dry holes ⁴.....	..do.....	2,923	877	(D)	722	342	(D)	(D)	(D)
Cost of equipment for flowing and pumping and production derrick, total ⁸.....	..do.....	15,073	3,753	14,467	2,756	152	375	454	622
Oil wells.....	..do.....	12,114	3,011	(D)	2,135	...	(D)	(D)	(D)
Gas wells.....	..do.....	2,480	514	2,328	491	152	23	...	...
Dry holes ⁴.....	..do.....	479	228	(D)	130	...	(D)	(D)	(D)
Amount paid or due contractors for drilling or equipping wells, total.....	..do.....	61,122	16,495	55,594	13,287	3,976	2,212	1,552	996
Oil wells.....	..do.....	29,325	9,065	(D)	7,155	...	(D)	(D)	(D)
Gas wells.....	..do.....	14,636	3,513	13,373	2,987	1,263	526	...	...
Dry holes ⁴.....	..do.....	17,161	3,917	(D)	3,145	2,713	(D)	(D)	(D)

NA Not available.

¹ Withheld to avoid approximately disclosing figures for individual companies.² For 1954, includes figures for the drilling of one dry hole in Mississippi.³ For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product.⁴ For 1958 and 1954, crude petroleum used in lease operations amounted to less than 0.1 percent of the total production of crude petroleum.⁵ Includes data for one service well drilled in California.⁶ Represents only the tangible costs specified below; respondents were asked to exclude taxes, interest on investment, overhead costs, etc.⁷ Represents the cost of labor, supplies, water, fuel, and power used in such operations as: moving on to location all equipment and supplies incidental to operations; building derrick foundation; erecting and wiring derricks; building loading and pipe racks; laying fuel and water lines; rigging up; drilling hole; making straight-hole tests or surveys; coring; well logging and core analysis; testing formations; mud conditioning; reaming; running casing, screen, and liner; cleaning out, bailing, and swabbing; fishing; repairing and maintaining rig and derrick; tearing down rig; dismantling derrick and racks; and moving equipment off location. It includes tool charges and rentals, but excludes the value of materials salvaged after use and the cost of the drilling derrick if it was left over well for production after completion.⁸ Includes the cost of delivering and installing equipment. Excludes the value of equipment that was salvaged and used again but includes the cost of salvaging.⁹ See footnote 7. Includes tubing, wellhead fittings, gas traps, flow tanks, etc., drilling derricks retained over well after completion, and special-production derricks.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

January 1960

MIC(P)-13C

NATURAL GAS LIQUIDS

(S.I.C. CODE 1321)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Natural Gas Liquids Industry were valued at \$1,620 million, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. This shipments figure represents the value of natural gas liquids shipped and also the value of residue gas and secondary products shipped. Net shipments of natural gas liquids were valued at \$699 million in 1958, an increase of 21 percent over 1954. Average employment in this industry showed a decrease of 8 percent from 1954 to 1958 to a total of 15.9 thousand employees in 1958. Value added in mining in the industry amounted to \$584 million in 1958. Value added is derived by subtracting the cost of supplies, minerals received for preparation,

purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE NATURAL GAS LIQUIDS INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	589	562	1,736
With 20 or more employees.....	...do.....	289	287	(NA)
All employees:				
Number.....	Number.....	15,893	17,340	10,337
Payroll.....	Thousand dollars.	92,502	85,057	18,264
Production and development workers:				
Number.....	Number.....	13,396	13,560	8,332
Man-hours.....	Thousands.....	26,871	27,862	16,634
Wages.....	Thousand dollars.	75,447	63,983	13,212
Value added in mining.....	...do.....	583,748	(NA)	(NA)
Cost of supplies, natural gas processed, natural gas liquids received for further processing, purchased fuel and electric energy, and contract work.....	...do.....	1,090,838	² 143,327	³ 19,592
Natural gas processed only.....	...do.....	850,579	(NA)	(NA)
Natural gas liquids received for further processing only.....	...do.....	142,029	57,556	(NA)
Contract work only.....	...do.....	44,514	36,726	3,984
Cost of purchased machinery installed.....	...do.....	40,511	65,752	(NA)
Value of shipments and receipts.....	...do.....	1,620,183	(NA)	(NA)
Value of net shipments of natural gas liquids ⁴.....	...do.....	698,639	576,828	96,185
Capital expenditures.....	...do.....	94,914	109,959	13,030

(NA) Not available.

¹Represents number of plants.²Excludes the cost of natural gas received for processing.³Excludes the cost of natural gas and natural gas liquids received for processing.⁴Represents value of shipments of natural gas liquids less value of natural gas liquids received for further processing.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Natural Gas Liquids Industry represents establishments engaged primarily in producing liquid hydrocarbons from oil and gas field gases. Establishments recovering liquefied petroleum gases incident to petroleum refining or to manufacturing of chemicals are classified in Major Groups 28 and 29. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Natural Gas Liquids Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Natural Gas Liquids Industry amounted to \$1,620 million dollars. Of this total, \$1,617 million were for natural gas liquids and residue gas which are products primary to the industry, and \$3 million were products primary to other industries, receipts for contract services, and products purchased and resold without further processing.

This report includes all natural gas liquids produced at plants primarily operated to produce such products. It does not include the production of such products at pipeline booster plants or as drips in oil and gas field operations or the production of liquefied refinery gas at petroleum refineries.

The total value of shipments for an industry contains some duplication introduced by

the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of gross shipments of natural gas liquids in 1958 was \$841 million and the value of net shipments of such products was \$699 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE NATURAL GAS LIQUIDS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Division and State	1958												1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Value of net shipments of natural gas liquids ¹	Capital expenditures	All employees, number	value of net shipments of natural gas liquids ¹
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages								
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	589	289	15,893	92,502	13,396	26,871	75,447	583,748	1,090,838	40,511	1,620,183	698,639	94,914	17,340	576,828
Middle Atlantic (Pennsylvania)...	7	...	17	69	17	30	67	206	1,516	124	1,700	242	146	37	405
North Central....	30	13	643	3,812	554	1,107	3,201	30,860	133,118	801	162,821	38,510	1,958	692	21,906
Kansas.....	15	7	328	1,882	275	550	1,533	11,810	57,280	158	68,630	10,957	618	(NA)	(NA)
South Atlantic (West Virginia)...	38	4	343	1,863	323	657	1,732	8,532	23,685	5,044	31,896	10,701	5,365	430	10,512
East South Central.....	11	5	230	1,306	202	403	1,103	9,009	33,323	152	37,543	12,158	4,941	236	9,785
West South Central, total...	384	212	11,665	67,256	9,724	19,574	54,114	437,057	703,138	25,209	1,099,999	505,777	65,405	12,837	397,718
Arkansas.....	9	3	205	1,242	178	393	1,039	4,142	5,229	326	8,141	5,381	1,556	258	5,697
Louisiana.....	55	21	1,208	7,172	1,013	2,068	5,904	56,473	122,733	6,966	172,700	70,650	13,472	1,201	61,263
Oklahoma.....	75	30	2,194	12,689	1,618	3,195	8,781	49,978	58,770	4,456	105,812	54,944	7,392	2,384	39,048
Texas.....	245	158	8,058	46,153	6,915	13,918	38,390	326,464	516,406	13,461	813,346	374,802	42,985	8,994	291,710
Mountain.....	53	22	1,205	7,150	1,055	2,133	6,246	39,404	84,479	8,119	116,951	45,373	15,051	1,007	25,114
Wyoming.....	12	3	250	1,474	216	430	1,216	3,989	7,316	957	10,116	5,778	2,146	297	5,252
New Mexico....	26	16	771	4,649	684	1,401	4,194	28,850	71,347	6,600	95,270	32,419	11,527	627	17,292
Pacific (California)....	66	33	1,790	11,046	1,521	2,967	8,984	58,680	111,579	1,062	169,273	85,878	2,048	2,101	111,388

NA Not available.

¹Represents value of shipments of natural gas liquids less value of natural gas liquids received for further processing.

Table 3.—PRIMARY PRODUCTS OF THE NATURAL GAS LIQUIDS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Product, Division, and State	Unit of quantity	1958			1954		
		Total production (quantity)	Total shipments including interplant transfers		Total production (quantity)	Total shipments including interplant transfers	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
United States, total:							
Natural gas liquids (gross) ¹	1,000 barrels.....	358,722	359,296	840,668	291,169	287,786	634,384
Natural gas liquids received from other natural gas liquids plants for further processing.....	.....do.....	64,733	64,733	142,029	35,719	35,719	57,556
Net natural gas liquids ².....	.....do.....	293,989	294,563	698,639	255,450	252,067	576,828
Residue gas:							
Shipped ⁴	Million cu. ft.....	xxx	7,663,990	776,045	xxx	6,693,269	(NA)
Used for fuel at plant.....	.....do.....	425,576	xxx	xxx	352,296	xxx	xxx
Middle Atlantic (Pennsylvania):							
Natural gas liquids ^{1,3}	1,000 barrels.....	68	80	242	139	138	405
Residue gas:							
Shipped ⁴	Million cu. ft.....	xxx	5,287	1,458	xxx	19,939	(NA)
Used for fuel at plant.....	.....do.....	65	xxx	xxx	40	xxx	xxx
North Central:							
Net natural gas liquids ^{1,2}	1,000 barrels.....	16,268	16,066	38,510	12,335	12,236	21,906
Residue gas:							
Shipped ⁴	Million cu. ft.....	xxx	579,964	124,000	xxx	527,600	(NA)
Used for fuel at plant.....	.....do.....	15,163	xxx	xxx	12,802	xxx	xxx
Kansas:							
Natural gas liquids ^{1,3}	1,000 barrels.....	5,359	5,173	10,957	(NA)	(NA)	(NA)
Residue gas:							
Shipped ⁴	Million cu. ft.....	xxx	382,119	57,660	xxx	(NA)	(NA)
Used for fuel at plant.....	.....do.....	6,144	xxx	xxx	(NA)	xxx	xxx
South Atlantic (West Virginia):							
Natural gas liquids (gross) ¹	1,000 barrels.....	6,687	6,670	10,813	6,484	6,528	10,512
Net natural gas liquids ².....	.....do.....	6,638	6,621	10,701	6,484	6,528	10,512
Residue gas:							
Shipped ⁴	Million cu. ft.....	xxx	151,671	21,076	xxx	194,439	(NA)
Used for fuel at plant.....	.....do.....	3,898	xxx	xxx	2,621	xxx	xxx

See footnotes at end of table.

Table 3.--PRIMARY PRODUCTS OF THE NATURAL GAS LIQUIDS INDUSTRY, BY DIVISIONS AND STATES: 1958 and 1954--Continued

Product, Division, and State	Unit of quantity	1958			1954		
		Total production (quantity)	Total shipments including interplant transfers		Total production (quantity)	Total shipments including interplant transfers	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
East South Central:							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	7,265	7,312	12,158	6,241	6,302	9,785
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	584,956	24,646	xxx	475,193	(NA)
Used for fuel at plant.....	.....do.....	5,779	xxx	xxx	5,973	xxx	xxx
Kentucky:							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	6,518	6,572	10,291	5,258	5,322	7,445
Mississippi:							
Natural gas liquids ^{1,3} ..	1,000 barrels....	747	740	1,867	983	980	2,340
West South Central:							
Natural gas liquids ¹	1,000 barrels....	271,417	272,454	636,923	(D)	(D)	(D)
Natural gas liquids received from other natural gas liquids plants for further processing.....	.....do.....	59,141	59,141	131,146	(D)	(D)	(D)
Net natural gas liquids ².....	.....do.....	212,276	213,313	505,777	184,662	181,770	397,718
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	5,240,058	461,973	xxx	4,511,846	(NA)
Used for fuel at plant.....	.....do.....	318,911	xxx	xxx	267,536	xxx	xxx
Arkansas:							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	2,228	2,229	5,381	2,602	2,572	5,697
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	33,527	2,734	xxx	51,736	(NA)
Used for fuel at plant.....	.....do.....	5,391	xxx	xxx	5,310	xxx	xxx
Louisiana:							
Natural gas liquids ¹	1,000 barrels....	28,444	28,679	81,158	(D)	(D)	(D)
Natural gas liquids received from other natural gas liquids plants for further processing.....	.....do.....	3,898	3,898	10,508	(D)	(D)	(D)
Net natural gas liquids ².....	.....do.....	24,546	24,781	70,650	22,408	22,159	61,263
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	876,149	91,248	xxx	564,479	(NA)
Used for fuel at plant.....	.....do.....	30,266	xxx	xxx	28,789	xxx	xxx
Oklahoma:							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	28,163	28,153	54,944	22,218	22,356	39,048
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	588,630	43,145	xxx	464,406	(NA)
Used for fuel at plant.....	.....do.....	47,829	xxx	xxx	36,074	xxx	xxx
Texas:							
Natural gas liquids ¹	1,000 barrels....	208,903	209,714	488,709	(D)	(D)	(D)
Natural gas liquids received from other natural gas liquids plants for further processing.....	.....do.....	51,564	51,564	113,907	(D)	(D)	(D)
Net natural gas liquids ².....	.....do.....	157,339	158,150	374,802	137,434	134,683	291,710
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	3,741,752	324,846	xxx	3,431,225	(NA)
Used for fuel at plant.....	.....do.....	235,425	xxx	xxx	197,363	xxx	xxx
Mountain:							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	22,877	22,630	45,373	14,170	13,798	25,114
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	639,167	63,400	xxx	474,443	(NA)
Used for fuel at plant.....	.....do.....	37,444	xxx	xxx	25,748	xxx	xxx
Wyoming:							
Natural gas liquids ^{1,3} ..	1,000 barrels....	2,547	2,522	5,778	2,248	2,219	5,252
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	46,310	4,104	xxx	52,016	(NA)
Used for fuel at plant.....	.....do.....	5,100	xxx	xxx	4,163	xxx	xxx
New Mexico:							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	17,107	16,903	32,419	10,869	10,540	17,292
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	538,514	55,060	xxx	390,314	(NA)
Used for fuel at plant.....	.....do.....	28,548	xxx	xxx	18,511	xxx	xxx
Montana and Colorado:							
Natural gas liquids ^{1,3} ..	1,000 barrels....	3,223	3,205	7,176	1,053	1,039	2,570
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	54,343	4,236	xxx	32,113	(NA)
Used for fuel at plant.....	.....do.....	3,796	xxx	xxx	3,074	xxx	xxx
Pacific (California):							
Net natural gas liquids ^{1,2} ..	1,000 barrels....	28,597	28,541	85,878	31,419	31,295	111,388
Residue gas:							
Shipped ⁴	Million cu. ft....	xxx	462,887	79,492	xxx	489,809	(NA)
Used for fuel at plant.....	.....do.....	44,316	xxx	xxx	37,576	xxx	xxx

NA Not available.

D Withheld to avoid approximate disclosure of figures for individual companies.

¹Represents natural gasoline, cycle condensate, and liquefied petroleum gases, including drip from lines, isopentane, and ethane. Also includes finished gasoline, kerosene, and distillate and residual oils produced at natural gasoline plants.²Represents gross natural gas liquids less natural gas liquids received from other natural gas liquids plants for further processing.³No natural gas liquids were received for further processing in this State. Hence, these figures are equivalent to net natural gas liquids, see footnote 2.⁴Represents all residue gas used by the reporting company at other company operations, gas returned to supplying producer, and gas delivered to other companies.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

June 1960

MIC(P)-13D-1

DRILLING OIL AND GAS WELLS SERVICES INDUSTRY

(S.I.C. CODE 1381)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts of the Drilling Oil and Gas Wells Services Industry were valued at \$904.0 million, a decrease of 7 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 13 percent from 1954 to 1958 to a total of 59.5 thousand employees in 1958. Value added in mining in the industry amounted to \$587.0 million in 1958, a decrease of 6 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, products purchased for resale,

purchased fuels and electric energy, subcontract work, and purchased machinery from receipts for services, other receipts, and capital expenditures. It avoids the duplication in receipts for services which results from the use of services of some establishments by other establishments. For this reason it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE DRILLING OIL AND GAS WELLS SERVICES INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	3,074	2,869	¹ 985
With 20 or more employees.....	..do.....	820	878	(NA)
All employees:				
Number.....	Number.....	59,456	67,976	24,224
Payroll.....	Thousand dollars..	288,908	304,312	41,937
Production and development workers:				
Number.....	Number.....	52,143	62,145	22,548
Man-hours.....	Thousands.....	109,692	133,216	38,621
Wages.....	Thousand dollars..	239,051	264,797	36,020
Value added in mining services.....	..do.....	586,997	623,967	(NA)
Cost of supplies, products purchased for resale, purchased fuel and electric energy, and subcontract work.....	..do.....	334,172	381,861	(NA)
Subcontract work only.....	..do.....	51,196	46,048	(NA)
Cost of purchased machinery installed.....	..do.....	84,766	120,385	(NA)
Receipts for services and other receipts.....	..do.....	903,972	972,745	128,107
Capital expenditures.....	..do.....	101,963	153,468	(NA)

NA Not available.

¹Represents number of operating companies.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Drilling Oil and Gas Wells Services Industry represents establishments engaged primarily in drilling wells for oil or gas for others on a contract, fee, or other basis. This industry includes contractors that specialize in "spudding in," "drilling in," redrilling, and directional drilling.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of about 36,300 establishments covered in the 1958 Census, approximately three-fourths were operated by single establishment companies. A single report was obtained from such companies. Establishments classified in the oil and gas field services industries, in general, filed one report for all contract services performed in the United States and Alaska. These reports were classified on the basis of the principal kind of work performed and the principal State in which the service was performed. The Drilling Oil and Gas Wells Services Industry includes establishments producing crude petroleum and natural gas whose receipts for contract work were greater than the value of shipments of oil and gas. In such cases, separate reports were required for each State in which the company operated wells. Companies were permitted, however, to prepare separate reports for their oil and gas production and their contract service activities, and a few companies prepared such separate reports, thus permitting the companies to combine their contract services operations for all States.

RECEIPTS FOR SERVICES

The receipts for services and other receipts reported by establishments classified in the Drilling Oil and Gas Wells Services Industry consisted not only of services described above as primary to the industry, but also included receipts for secondary services (which are primary in other industries), receipts for oil and gas produced, and receipts for products purchased and resold without further processing at the establishment. The total receipts of establishments classified in the Drilling Oil and Gas Wells Services Industry amounted to \$904.0 million. Of this total, \$839.7 million were services primary to the industry.

The total receipts for services for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary services of the industry by all contractors. The latter figure, appearing in table 3, indicates that receipts for primary services of this industry in 1958 were \$889.1 million. Of this total, \$839.7 million or 94 percent represented services by establishments classified in the industry, while the remainder represented services which were secondary activities of establishments classified in other industries.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of secondary services for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with primary services statistics (table 3) which show receipts for these primary services by all establishments performing such services.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports are being issued for other industries. Also summaries of preliminary United States totals for each mining industry and totals for each State have been issued. Final industry reports and final States reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE DRILLING OIL AND GAS WELLS SERVICES INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

(In general, contractors prepared one report for all oil and gas field services performed in the United States and Alaska. These reports were classified on the basis of the principal kind of work and the principal State in which the service was performed)

Division and State	1958												1954	
	Establish- ments, number		All employees		Production and development workers			Value added in mining services	Cost of supplies, products purchased for resale, purchased energy, and sub- contract work	Cost of pur- chased machin- ery in- stalled	Receipts for services and other receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining services
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States, total.....	3,074	820	59,456	288,908	52,143	109,692	239,051	586,997	334,172	84,766	903,972	101,963	67,976	623,967
Middle Atlantic, total.....	107	14	1,063	5,098	968	2,120	4,439	11,169	3,647	1,472	15,253	1,035	1,092	7,893
New York.....	20	1	72	300	67	153	273	484	233	63	741	39	136	854
Pennsylvania.....	87	13	991	4,798	901	1,967	4,166	10,685	3,414	1,409	14,512	996	956	7,039
East North Central, total.....	371	42	3,720	14,206	3,344	6,072	12,349	27,034	14,552	2,670	40,692	3,564	3,962	36,191
Ohio.....	113	6	808	3,087	754	1,490	2,782	5,228	2,950	456	8,202	432	772	4,537
Indiana.....	64	2	384	1,366	348	600	1,114	2,959	1,176	351	4,124	362	336	2,330
Illinois.....	156	28	1,995	6,910	1,786	2,943	6,121	14,295	7,590	1,389	21,000	2,274	2,261	23,777
Michigan.....	38	6	533	2,843	456	1,039	2,332	4,552	2,836	474	7,366	496	593	5,547
West North Central....	280	44	3,346	15,099	2,963	6,110	12,748	31,349	17,601	4,130	47,436	5,644	4,091	39,884
North Dakota.....	21	9	528	3,180	480	1,167	2,793	6,585	4,014	1,170	9,993	1,776	164	2,472
Nebraska.....	20	4	239	953	227	406	857	2,437	1,661	565	3,884	779	219	2,667
Kansas.....	233	31	2,560	10,869	2,238	4,489	9,008	22,028	11,864	2,394	33,197	3,089	3,650	34,353
South Atlantic.....	106	14	929	3,392	881	1,984	3,191	5,245	2,379	512	7,529	607	1,147	7,506
West Virginia.....	102	14	901	3,264	853	1,897	3,063	4,975	2,285	512	7,165	607	966	6,449
East South Central....	259	25	2,287	8,738	1,996	4,114	7,623	18,003	11,665	2,643	29,420	2,891	2,002	13,397
Kentucky.....	227	11	1,354	3,871	1,288	2,326	3,644	7,212	3,156	671	10,339	700	1,091	6,570
Mississippi.....	23	13	865	4,646	646	1,696	3,788	10,398	8,132	1,928	18,310	2,148	884	6,672
West South Central, total.....	1,587	551	39,488	193,085	34,470	73,257	158,244	401,148	229,910	63,495	618,660	75,893	44,180	412,554
Arkansas.....	34	4	399	1,558	364	703	1,364	3,519	2,160	629	5,717	591	262	2,301
Louisiana.....	214	121	10,985	65,967	9,495	23,445	54,019	152,112	76,420	32,663	220,117	41,078	9,046	96,696
Oklahoma.....	380	93	6,523	28,081	5,721	11,435	22,738	55,207	30,273	8,573	84,447	9,606	8,915	72,932
Texas.....	959	333	21,581	97,479	18,890	37,674	80,123	190,310	121,057	21,630	308,379	24,618	25,957	240,625
Mountain, total.....	265	97	5,952	32,888	5,224	11,613	27,235	65,340	39,576	6,395	102,882	8,429	6,265	59,474
Wyoming.....	68	25	1,603	8,622	1,398	2,794	7,129	17,421	9,034	1,905	26,232	2,128	1,795	22,075
Colorado.....	56	19	996	5,281	822	1,707	3,975	9,599	6,060	736	15,110	1,285	1,604	11,465
New Mexico.....	93	39	2,135	11,644	1,930	4,432	10,005	23,962	14,620	2,137	38,437	2,282	2,007	18,724
Utah.....	16	9	857	5,334	754	2,011	4,448	10,238	8,086	1,427	17,331	2,420	1,148	11,052
Montana and Idaho...	32	5	361	2,007	320	669	1,678	4,120	1,776	190	5,772	314	711	6,158
Pacific.....	99	33	2,671	16,402	2,297	4,422	13,222	27,709	14,842	3,449	42,100	3,900	5,237	47,068

NA Not available.

¹Represents Arizona and Utah.

Table 3A.—PRIMARY SERVICES OF THE DRILLING OIL AND GAS WELLS SERVICES INDUSTRY PERFORMED BY ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

(In general, contractors prepared one report for all oil and gas field services performed in the United States and Alaska. These reports were classified on the basis of the principal State in which the service was performed. Separate data were contained in these reports for the various kinds of work performed)

Type of service, division, and State	Receipts for services (\$1,000)		Type of service, division, and State	Receipts for services (\$1,000)	
	1958	1954		1958	1954
UNITED STATES			EAST SOUTH CENTRAL		
Drilling oil and gas wells, total.....	889,057	921,233	Drilling oil and gas wells, total.....	29,020	18,901
Drilling oil, gas, dry, and service wells.....	814,177	872,210	Drilling oil, gas, dry, and service wells.....	27,974	18,112
Drilling in, spudding in, tailing in, and reworking wells.....	74,880	49,023	Drilling in, spudding in, tailing in, and reworking wells.....	1,046	789
MIDDLE ATLANTIC			Kentucky		
Drilling oil and gas wells, total.....	13,319	9,299	Drilling oil and gas wells.....	10,467	8,610
Drilling oil, gas, dry, and service wells.....	12,528	8,672	Drilling oil, gas, dry, and service wells.....	9,705	8,248
Drilling in, spudding in, tailing in, and reworking wells.....	791	627	Alabama		
New York			Drilling oil and gas wells.....	1,109	167
Drilling oil and gas wells.....	720	911	Mississippi		
Pennsylvania			Drilling oil and gas wells.....	17,366	10,065
Drilling oil and gas wells.....	12,599	8,388	Drilling oil, gas, dry, and service wells.....	17,314	9,641
EAST NORTH CENTRAL			WEST SOUTH CENTRAL		
Drilling oil and gas wells, total.....	39,405	42,167	Drilling oil and gas wells, total.....	606,885	626,192
Drilling oil, gas, dry, and service wells.....	33,946	39,268	Drilling oil, gas, dry, and service wells.....	558,049	589,839
Drilling in, spudding in, tailing in, and reworking wells.....	5,459	2,899	Drilling in, spudding in, tailing in, and reworking wells.....	48,836	36,353
Ohio			Arkansas		
Drilling oil and gas wells.....	7,355	5,094	Drilling oil and gas wells.....	5,809	3,191
Drilling oil, gas, dry, and service wells.....	7,051	5,003	Drilling oil, gas, dry, and service wells.....	5,404	3,172
Indiana			Louisiana		
Drilling oil and gas wells.....	4,134	2,855	Drilling oil and gas wells, total.....	215,296	146,087
Drilling oil, gas, dry, and service wells.....	3,737	2,804	Drilling oil, gas, dry, and service wells.....	204,905	138,189
Illinois			Drilling in, spudding in, tailing in, and reworking wells.....	10,391	7,898
Drilling oil and gas wells, total.....	20,945	26,719	Oklahoma		
Drilling oil, gas, dry, and service wells.....	16,543	24,009	Drilling oil and gas wells, total.....	79,589	113,732
Drilling in, spudding in, tailing in, and reworking wells.....	4,402	2,710	Drilling oil, gas, dry, and service wells.....	72,975	105,576
Michigan			Drilling in, spudding in, tailing in, and reworking wells.....	6,614	8,156
Drilling oil and gas wells.....	6,971	7,499	Texas		
Drilling oil, gas, dry, and service wells.....	6,615	7,452	Drilling oil and gas wells, total.....	306,191	363,182
WEST NORTH CENTRAL			Drilling oil, gas, dry, and service wells.....	274,765	342,902
Drilling oil and gas wells, total.....	48,581	53,050	Drilling in, spudding in, tailing in, and reworking wells.....	31,426	20,280
Drilling oil, gas, dry, and service wells.....	42,781	49,098	MOUNTAIN		
Drilling in, spudding in, tailing in, and reworking wells.....	5,800	3,952	Drilling oil and gas wells, total.....	102,970	93,308
North Dakota			Drilling oil, gas, dry, and service wells.....	93,478	91,218
Drilling oil and gas wells.....	9,573	3,063	Drilling in, spudding in, tailing in, and reworking wells.....	9,492	2,090
Drilling oil, gas, dry, and service wells.....	9,425	3,063	Wyoming		
Nebraska			Drilling oil and gas wells, total.....	26,677	31,513
Drilling oil and gas wells.....	4,365	3,504	Drilling oil, gas, dry, and service wells.....	25,077	30,793
Drilling oil, gas, dry, and service wells.....	3,909	3,471	Drilling in, spudding in, tailing in, and reworking wells.....	1,600	720
Kansas			Colorado		
Drilling oil and gas wells, total.....	34,288	45,829	Drilling oil and gas wells, total.....	15,185	21,478
Drilling oil, gas, dry, and service wells.....	29,111	41,910	Drilling oil, gas, dry, and service wells.....	13,272	21,274
Drilling in, spudding in, tailing in, and reworking wells.....	5,177	3,919	Drilling in, spudding in, tailing in, and reworking wells.....	1,913	204
SOUTH ATLANTIC			New Mexico		
Drilling oil and gas wells, total.....	6,786	8,063	Drilling oil and gas wells, total.....	38,022	29,276
Drilling oil, gas, dry, and service wells.....	6,580	7,895	Drilling oil, gas, dry, and service wells.....	32,257	28,626
Drilling in, spudding in, tailing in, and reworking wells.....	206	168	Drilling in, spudding in, tailing in, and reworking wells.....	5,765	650
West Virginia			Utah		
Drilling oil and gas wells.....	6,422	6,463	Drilling oil and gas wells (drilling oil, gas, dry, and service wells only).....	17,331	(D)
Drilling oil, gas, dry, and service wells.....	6,216	6,295	Montana and Idaho		
PACIFIC			Drilling oil and gas wells.....	5,755	(D)
Drilling oil and gas wells, total.....	42,091	70,253	Drilling oil, gas, dry, and service wells.....	5,541	(NA)
Drilling oil, gas, dry, and service wells.....	38,841	68,108	PACIFIC		
Drilling in, spudding in, tailing in, and reworking wells.....	3,250	2,145	Drilling oil and gas wells, total.....	42,091	70,253
			Drilling oil, gas, dry, and service wells.....	38,841	68,108
			Drilling in, spudding in, tailing in, and reworking wells.....	3,250	2,145

D Withheld to avoid approximately disclosing figures for individual companies.

NA Not available.

Table 3B.—NUMBER AND FOOTAGE OF OIL, GAS, DRY, AND SERVICE WELLS DRILLED AND COSTS BORNE BY DRILLING CONTRACTORS IN DRILLING AND EQUIPPING WELLS DRILLED ON CONTRACT IN THE UNITED STATES: 1958, 1954, AND 1939; AND FOR GEOGRAPHIC DIVISIONS AND STATES: 1958

(Represents wells drilled on contract for others by establishments classified in the oil and gas field services industries and in the crude petroleum and natural gas industry. All wells reported by an establishment were classified in the principal state in which the establishment performed services)

Item	United States, total			Middle Atlantic			East North Central				
	1958	1954	1939	Total	New York	Pennsylvania	Total	Ohio	Indiana	Illinois	Michigan
Number of wells drilled, total ⁶	37,977	45,264	12,729	644	120	524	3,733	784	624	1,870	455
Oil wells.....	21,327	27,447	10,344	300	74	226	1,695	404	274	880	137
Gas wells.....	3,429	3,103	758	284	25	259	280	208	20	13	39
Dry holes.....	12,140	13,270	1,627	37	12	25	1,537	149	326	822	240
Service wells.....	1,081	1,444	(NA)	23	9	14	221	23	4	155	39
Footage drilled, total...1,000 ft..	153,332	171,391	40,083	2,121	203	1,918	8,598	2,125	971	4,310	1,192
Oil wells.....do...	82,366	103,363	32,786	597	112	485	4,130	1,202	443	2,089	396
Gas wells.....do...	16,991	12,475	2,155	1,318	49	1,269	607	483	9	7	108
Dry holes.....do...	52,339	53,483	5,142	174		164	3,508	384	513	1,987	624
Service wells.....do...	1,636	2,070	(NA)	32	42		353	56	6	227	64
Average footage drilled per well, all wells.....	4,037	3,786	3,149	3,293	1,694	3,659	2,304	2,711	1,558	2,305	2,620
Oil wells.....do...	3,862	3,766	3,170	1,989	1,513	2,145	2,437	2,976	1,618	2,374	2,889
Gas wells.....do...	4,955	4,020	2,843	4,639	1,940	4,899	2,171	2,322	472	550	2,781
Dry holes.....do...	4,311	4,030	3,160	4,699			2,282	2,579	1,574	2,417	2,598
Service wells.....do...	1,513	1,434	(NA)	1,413	2,038	4,194	1,599	2,422	1,562	1,467	1,642
Costs borne by contractors in drilling and equipping wells on contract, total ⁸.....\$1,000..	655,207	715,820	98,752	9,056	540	8,516	27,359	5,854	2,951	13,061	5,493
Per well.....do...	17.3	15.8	7.8	14.1	4.5	16.3	7.3	7.5	4.7	7.0	12.1
Per foot.....do...	4.27	4.18	2.46	4.27	2.66	4.44	3.18	2.75	3.04	3.03	4.61
Oil wells.....do...	348,810	437,499	81,261	1,427	173	1,254	12,687	3,376	1,349	6,189	1,773
Per well.....do...	16.4	15.9	7.9	2.3	2.3	5.5	7.5	8.4	4.9	7.0	12.9
Per foot.....do...	4.23	4.23	2.48	2.39	1.55	2.59	3.07	2.81	3.04	2.96	4.48
Gas wells.....do...	85,944	55,887	4,520	6,636	203	6,433	1,942	1,348	39	22	533
Per well.....do...	25.1	18.0	6.0	23.4	8.1	24.8	6.9	6.5	2.0	1.7	13.7
Per foot.....do...	5.06	4.48	2.10	5.04	4.19	5.07	3.19	2.79	4.13	3.07	4.92
Dry holes.....do...	215,214	216,337	12,971	861	9164	9829	10,971	1,037	1,546	5,713	2,675
Per well.....do...	17.7	16.3	8.0	23.3	97.8	921.3	7.1	7.0	4.7	7.0	11.1
Per foot.....do...	4.11	4.04	2.52	4.95	93.83	95.07	3.13	2.70	3.01	2.88	4.29
Service wells.....do...	5,239	6,097	(NA)	132	(9)	(9)	1,759	93	17	1,137	512
Per well.....do...	4.8	4.2	(NA)	5.7	(9)	(9)	8.0	4.0	4.2	7.3	13.1
Per foot.....do...	3.20	2.95	(NA)	4.06	(9)	(9)	4.98	1.67	2.72	5.00	7.99
Cost, excluding amount paid or due subcontractors, total ⁸.....\$1,000..	631,727	696,351	98,752	8,942	540	8,402	26,558	5,457	2,902	12,784	5,415
Oil wells.....do...	335,941	426,051	81,261	1,427	173	1,254	12,270	3,109	1,322	6,081	1,758
Gas wells.....do...	83,741	54,041	4,520	6,533	203	6,330	1,894	1,311	39	22	522
Dry holes.....do...	206,944	210,302	12,971	861			10,638	944	1,524	5,547	2,623
Service wells.....do...	5,101	5,957	(NA)	121	164	818	1,756	93	17	1,134	512
Cost of drilling, total ¹⁰.....do...	627,369	689,037	95,604	8,567	531	8,036	25,808	5,119	2,894	12,563	5,232
Oil wells.....do...	333,392	420,353	78,512	1,427	173	1,254	11,706	2,816	1,316	5,865	1,709
Gas wells.....do...	82,663	53,066	4,290	6,170	203	5,967	1,810	1,280	39	20	471
Dry holes.....do...	206,242	209,690	12,802	851			10,546	930	1,522	5,544	2,550
Service wells.....do...	5,072	5,928	(NA)	119	155	815	1,746	93	17	1,134	502
Cost of casing, total ¹¹.....do...	3,007	4,494	1,995	344	9	335	455	230	1	78	146
Oil wells.....do...	1,533	3,110	1,690	...	...	...	294		...	73	
Gas wells.....do...	764	748	150	334	...	334	64	216	...	2	67
Dry holes.....do...	691	607	155	10	9	1	88	14	1	3	70
Service wells.....do...	19	29	(NA)	...	...	...	9	...	...	...	9
Cost of equipment for flowing and pumping and production derrick, total ¹³.....do...	1,351	2,820	1,153	31	...	31	295	108	7	143	37
Oil wells.....do...	1,016	2,588	1,059	...	...	...	270		6	143	
Gas wells.....do...	314	227	80	29	...	29	20	108	...	...	33
Dry holes.....do...	11	5	14	...	...	...	4	...	1	...	3
Service wells.....do...	10	...	(NA)	2	...	2	1	...	...	...	1
Amount paid or due subcontractors for drilling and equipping wells, total.....do...	23,480	19,469	(NA)	114	...	114	801	397	49	277	78
Oil wells.....do...	12,869	11,448	(NA)	...	...	...	417	267	27	108	15
Gas wells.....do...	2,203	1,846	(NA)	103	...	103	48	37	...	...	11
Dry holes.....do...	8,270	6,035	(NA)	...	...	...	333	93	22	166	52
Service wells.....do...	138	140	(NA)	11	...	11	3	...	...	3	...

See footnotes at end of table.

Table 3B.—NUMBER AND FOOTAGE OF OIL, GAS, DRY, AND SERVICE WELLS DRILLED AND COSTS BORNE BY DRILLING CONTRACTORS IN DRILLING AND EQUIPPING WELLS DRILLED ON CONTRACT IN THE UNITED STATES: 1958, 1954, AND 1939; AND FOR GEOGRAPHIC DIVISIONS AND STATES: 1958—Continued

Item	North Central				South Atlantic ²	East South Central			
	Total	North Dakota	Nebraska	Missouri and Kansas ¹		Total	Kentucky	Mississippi	Tennessee and Alabama ³
Number of wells drilled, total ⁶ ...	3,592	224	237	3,131	512	2,274	1,918	324	32
Oil wells.....do...	2,318	173	123	2,022	77	1,261	1,085	161	15
Gas wells.....do...	122	3	...	119	381	184	171	10	3
Dry holes.....do...	1,075	48	114	913	45	780	617	149	14
Service wells.....do...	77	...	...	77	9	49	45	4	...
Footage drilled, total...1,000 ft..	11,281	1,400	1,330	8,551	1,384	5,493	2,476	2,802	215
Oil wells.....do...	7,071	1,139	705	5,227	200	2,852	1,162	1,528	162
Gas wells.....do...	350	18	...	332	1,051	514	415	96	3
Dry holes.....do...	3,705	243	625	2,837	121	2,063	844	1,169	50
Service wells.....do...	155	...	...	155	12	64	55	9	...
Average footage drilled per well, all wells.....do...	3,141	6,248	5,614	2,731	2,702	2,415	1,291	8,647	6,718
Oil wells.....do...	3,051	6,582	5,735	2,585	2,600	2,262	1,071	9,488	10,846
Gas wells.....do...	2,870	5,948	xxx	2,792	2,758	2,797	2,432	9,579	1,008
Dry holes.....do...	3,447	5,062	5,483	3,108	2,681	2,644	1,367	7,848	3,520
Service wells.....do...	2,017	xxx	xxx	2,017	1,333	1,297	1,213	2,250	xxx
Costs borne by contractors in drilling and equipping wells on contract, total ⁸.....\$1,000..	33,214	7,407	3,151	22,656	5,555	23,412	7,311	14,979	1,122
Per well.....do...	9.2	33.1	13.3	7.2	10.8	10.3	3.8	46.2	35.1
Per foot.....do...	2.94	5.29	2.37	2.65	4.01	4.26	2.95	5.35	5.22
Oil wells.....do...\$1,000..	21,608	6,175	1,544	13,889	733	12,194	3,484	7,806	904
Per well.....do...	9.3	35.7	12.6	6.9	9.5	9.7	3.2	48.5	60.3
Per foot.....do...\$1,000..	3.06	5.42	2.19	2.66	3.66	4.28	3.00	5.11	5.56
Gas wells.....do...\$1,000..	1,023	69	...	954	4,287	2,352	1,593	743	16
Per well.....do...	8.4	23.0	xxx	8.0	11.3	12.8	9.3	74.3	5.3
Per foot.....do...\$1,000..	2.92	3.87	xxx	2.87	4.08	4.57	3.83	7.76	5.29
Dry holes.....do...\$1,000..	10,190	1,163	1,607	7,420	517	8,726	2,120	6,404	202
Per well.....do...	9.5	24.2	14.1	8.1	11.5	11.2	3.4	43.0	14.4
Per foot.....do...\$1,000..	2.75	4.79	2.57	2.61	4.28	4.23	2.51	5.48	4.10
Service wells.....do...\$1,000..	393	...	...	393	18	140	114	26	...
Per well.....do...	5.1	xxx	xxx	5.1	2.0	2.9	2.5	6.5	xxx
Per foot.....do...\$1,000..	2.53	xxx	xxx	2.53	1.50	2.20	2.09	2.89	xxx
Cost, excluding amount paid or due subcontractors, total.....\$1,000..	31,827	6,980	3,012	21,835	5,538	22,492	7,055	14,320	1,117
Oil wells.....do...	20,663	5,809	1,482	13,372	733	11,710	...	...	899
Gas wells.....do...	964	47	...	917	4,270	2,255	6,942	14,294	16
Dry holes.....do...	9,824	1,124	1,530	7,170	517	8,388	...	...	202
Service wells.....do...	376	...	...	376	18	139	113	26	...
Cost of drilling, total ¹⁰.....do...	31,603	6,980	2,995	21,628	5,425	21,867	6,815	14,082	970
Oil wells.....do...	20,459	5,809	1,481	13,169	700	11,289	3,125	7,412	752
Gas wells.....do...	964	47	...	917	4,190	2,169	1,495	658	16
Dry holes.....do...	9,807	1,124	1,514	7,169	517	8,278	2,090	5,986	202
Service wells.....do...	373	...	...	373	18	131	105	26	...
Cost of casing, total ¹¹.....do...	113	...	17	96	59	434	120	209	105
Oil wells.....do...	95	...	1	94	19	251	...	...	105
Gas wells.....do...	...	...	...	...	40	70	117	209	...
Dry holes.....do...	17	...	16	1	...	110	...	...	...
Service wells.....do...	1	...	...	1	...	3	3	...	...
Cost of equipment for flowing and pumping and production derrick, total ¹³.....do...	111	...	...	111	54	191	120	29	42
Oil wells.....do...	109	...	...	109	14	170	...	29	42
Gas wells.....do...	...	...	...	...	40	16	115	...	...
Dry holes.....do...	...	...	...	...	...	...	...	...	...
Service wells.....do...	2	...	...	2	...	5	5	...	...
Amount paid or due subcontractors for drilling and equipping wells, total.....do...	1,387	427	139	821	17	920	256	659	5
Oil wells.....do...	945	366	62	517	...	484	...	...	5
Gas wells.....do...	59	22	...	37	17	97	255	659	...
Dry holes.....do...	366	39	77	250	...	338	...	...	...
Service wells.....do...	17	...	...	17	...	1	1	...	...

See footnotes at end of table.

Table 3B.—NUMBER AND FOOTAGE OF OIL, GAS, DRY, AND SERVICE WELLS DRILLED AND COSTS BORNE BY DRILLING CONTRACTORS IN DRILLING AND EQUIPPING WELLS DRILLED ON CONTRACT IN THE UNITED STATES: 1958, 1954, AND 1939; AND FOR GEOGRAPHIC DIVISIONS AND STATES: 1958—Continued

Item	West South Central					Mountain						Pacific ⁵
	Total	Arkansas	Louisiana	Oklahoma	Texas	Total	Wyoming	Colorado	New Mexico	Utah	Montana and Idaho ⁴	
Number of wells drilled, total ⁶	22,576	396	3,248	4,994	13,938	3,553	723	870	1,298	416	246	1,093
Oil wells.....	13,377	239	1,742	3,011	8,385	1,677	386	216	741	215	119	622
Gas wells.....	1,572	9	418	222	923	572	60	35	351	110	16	34
Dry holes ⁷	6,975	144	1,055	1,467	4,309	1,263	261	596	205	90	111	428
Service wells.....	652	4	33	294	321	41	16	23	1	1	...	9
Footage drilled, total.....1,000 ft.....	100,909	1,395	25,485	15,747	58,282	17,872	3,684	4,431	6,096	2,404	1,297	5,674
Oil wells.....do.....	56,052	745	12,605	8,883	33,819	8,295	1,958	1,154	3,348	1,297	538	3,169
Gas wells.....do.....	10,187	45	3,717	1,100	5,325	2,772	299	142	1,604	603	124	192
Dry holes.....do.....	33,766	595	9,055	5,294	18,822	6,703	1,380	3,081	1,144	504	595	2,299
Service wells.....do.....	904	10	108	470	316	102	47	54	...	...	...	14
Average footage drilled per well, all wells.....	4,470	3,522	7,846	3,153	4,182	5,030	5,094	5,093	4,697	5,779	5,112	5,191
Oil wells.....do.....	4,190	3,119	7,236	2,950	4,033	4,947	5,072	5,343	4,519	6,032	4,525	5,095
Gas wells.....do.....	6,480	4,948	8,893	4,953	5,770	4,846	4,981	4,044	4,570	5,480	7,781	5,642
Dry holes.....do.....	4,841	4,131	8,583	3,609	4,368	5,307	5,150	5,170	5,555	5,544	5,357	5,371
Service wells.....do.....	1,386	2,500	3,266	1,600	983	2,487	...	2,333	...	...	xxx	1,583
Costs borne by contractors in drilling and equipping wells on contract, total ⁸.....\$1,000.....	441,902	3,792	156,175	60,085	221,850	80,991	21,495	11,164	29,538	14,365	4,429	33,718
Per well.....do.....	19.6	9.6	48.1	12.0	15.9	22.8	29.7	12.8	22.8	34.5	18.0	30.8
Per foot.....do.....\$1.00.....	4.38	2.72	6.13	3.82	3.81	4.53	5.84	2.52	4.84	5.98	3.52	5.94
Oil wells.....do.....\$1,000.....	241,050	1,846	79,670	31,747	127,787	39,554	11,158	3,130	14,618	8,464	2,184	19,557
Per well.....do.....	18.0	7.7	45.7	10.5	15.2	23.6	28.9	14.5	19.7	39.4	18.4	31.4
Per foot.....do.....\$1.00.....	4.30	2.48	6.32	3.57	3.78	4.77	5.70	2.71	4.37	6.53	4.06	6.17
Gas wells.....do.....\$1,000.....	54,367	273	24,003	6,171	23,920	14,532	2,509	568	8,478	2,691	286	805
Per well.....do.....	34.6	30.3	57.4	27.8	25.9	25.4	41.8	16.2	24.2	24.5	17.9	23.7
Per foot.....do.....\$1.00.....	5.34	6.13	6.46	5.61	4.49	5.24	8.40	4.01	5.29	4.46	2.30	4.20
Dry holes.....do.....\$1,000.....	144,040	1,629	52,143	20,970	69,298	26,606	9,828	7,350	9,442	9,210	1,959	13,303
Per well.....do.....	20.7	11.3	49.4	14.3	16.1	21.1	28.3	12.3	31.3	35.3	17.6	31.1
Per foot.....do.....\$1.00.....	4.27	2.74	5.76	3.96	3.68	3.97	5.49	2.39	5.63	6.36	3.29	5.79
Service wells.....do.....\$1,000.....	2,445	44	359	1,197	845	299	(⁹)	116	(⁹)	(⁹)	...	53
Per well.....do.....	3.8	11.0	10.9	4.1	2.6	7.3	(⁹)	5.0	(⁹)	(⁹)	xxx	5.9
Per foot.....do.....\$1.00.....	2.71	4.40	3.33	2.54	2.68	2.93	(⁹)	2.16	(⁹)	(⁹)	xxx	3.72
Cost, excluding amount paid or due subcontractors, total.....\$1,000.....	426,863	3,622	149,355	59,078	214,808	76,919	20,373	9,774	28,272	14,228	4,272	32,588
Oil wells.....do.....	231,972	1,756	75,863	31,161	123,192	38,029	10,819	2,865	13,879	8,361	2,105	19,137
Gas wells.....do.....	53,019	273	23,171	6,120	23,455	14,020	2,402	546	8,107	2,687	278	786
Dry holes.....do.....	139,484	1,549	49,967	20,632	67,336	24,620	7,152	6,363	6,286	3,180	1,889	12,612
Service wells.....do.....	2,388	44	354	1,165	825	250	...	...	...	...	...	53
Cost of drilling, total ¹⁰.....do.....	424,787	3,522	148,935	58,906	213,424	76,746	20,310	9,671	28,265	14,228	4,272	32,566
Oil wells.....do.....	230,792	1,660	75,702	30,996	122,434	37,893	10,778	2,777	13,872	8,361	2,105	19,126
Gas wells.....do.....	52,555	273	23,043	6,120	23,119	14,020	2,402	546	8,107	2,687	278	785
Dry holes.....do.....	139,058	1,545	49,836	20,627	67,050	24,583	7,130	6,348	6,286	3,180	1,889	12,602
Service wells.....do.....	2,382	44	354	1,163	821	250	...	...	...	...	...	53
Cost of casing, total ¹¹.....do.....	1,407	83	355	107	862	12173	1263	12103	127	...	...	1222
Oil wells.....do.....	727	79	114	100	434	12136	1241	1288	127	...	...	1211
Gas wells.....do.....	255	...	110	...	145	...	...	...	...	...	...	1
Dry holes.....do.....	419	4	131	5	279	37	22	15	...	...	...	10
Service wells.....do.....	6	...	...	2	4	...	...	...	...	...	...	...
Cost of equipment for flowing and pumping and production derrick, total ¹³.....do.....	669	17	65	65	522	(12)	(12)	(12)	(12)	...	...	(12)
Oil wells.....do.....	453	17	47	65	324	(12)	(12)	(12)	(12)	...	...	(12)
Gas wells.....do.....	209	...	18	...	191	...	...	...	...	...	...	...
Dry holes.....do.....	7	...	...	...	7	...	...	...	...	...	...	...
Service wells.....do.....	...	...	...	...	...	...	...	...	...	...	...	...
Amount paid or due subcontractors for drilling and equipping wells, total.....do.....	15,039	170	6,820	1,007	7,042	4,072	1,122	1,390	1,266	137	157	1,130
Oil wells.....do.....	9,078	90	3,807	586	4,595	1,525	339	265	739	103	79	420
Gas wells.....do.....	1,348	...	832	51	465	512	107	22	371	4	8	19
Dry holes.....do.....	4,556	80	2,176	338	1,962	1,986	...	...	156	30	70	691
Service wells.....do.....	57	...	5	32	20	49	676	1,103	...	...	...	...

NA Not available. xxx Not applicable. ¹Only 2 oil wells, 9 dry holes, and 6 service wells were reported drilled by contractors classified in Missouri. ²Represents West Virginia; and 1 gas well drilled by contractors classified in Maryland, 10 gas wells drilled by contractors classified in Virginia, and 1 dry hole drilled by contractors classified in Florida. ³Only 2 gas wells and 8 dry holes were reported drilled by contractors classified in Tennessee. ⁴Only 1 dry hole was reported drilled by contractors classified in Idaho. ⁵Represents California; and 1 oil well and 7 dry holes drilled by contractors classified in Washington. ⁶Represents wells drilled which were completed during the year, and includes wells completed during the year, although begun in the previous year. ⁷Dry holes represents wells drilled and abandoned without commercial production during the year. Service wells include gas-injection, water-injection and brine-disposal wells. The distinction between dry holes and service wells was not made uniformly by all contractors, hence, the combined figures for dry holes and service wells in a State are somewhat more significant than the separate figures for each class. ⁸Represents only the tangible costs specified; respondents were asked to exclude taxes, interest on investment, overhead costs, etc.; and to exclude costs for work or equipment furnished by oil and gas companies and not covered by the receipts for contract work. Represents only costs as reported by the contractor who drilled the well. Excludes payments made directly to other types of contractors by operators of oil and gas field properties. ⁹Figures for service wells are included with those for dry holes. ¹⁰Represents the cost of labor, supplies, water, fuel, and power used in such operations as: Moving on to location all equipment and supplies incidental to operations; excavating for and building derrick foundations; digging slush pits; erecting and wiring derricks; building loading and pipe racks; laying fuel and water lines; rigging up; drilling hole; making straight-hole tests and surveys; coring; testing formations; mud conditioning; reaming; running casing, screen, and liner; cleaning out, bailing, and swabbing; fishing; repairing and maintaining rig and derrick; testing down rig; dismantling derrick and racks; and moving equipment off location. It includes tool charges and rentals, but excludes the value of materials salvaged after use and the cost of the drilling derrick if it was left over well for production after completion. ¹¹Includes the cost of delivering and installing equipment. Excludes the value of equipment that was salvaged and used again but includes the cost of salvaging. ¹²Figures for equipment for flowing and pumping and production derrick are included with those for casing. ¹³See footnote 11. Includes tubing, wellhead fittings, gas traps, flow tanks, etc., drilling derricks retained over well after completion, and special-production derricks.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC (P) -13D-2

OIL AND GAS FIELD EXPLORATION SERVICES

(S.I.C. CODE 1382)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts of the Oil and Gas Field Exploration Services Industry were valued at \$87.2 million, a decrease of 24 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 17 percent from 1954 to 1958 to a total of 9.5 thousand employees in 1958. Value added in mining in the industry amounted to \$64.3 million in 1958, a decrease of 21 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, products

purchased for resale, purchased fuels and electric energy, subcontract work, and purchased machinery from receipts for services and capital expenditures. It avoids the duplication in receipts for services which results from the use of services of some establishments by other establishments. For this reason it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—SUMMARY STATISTICS FOR THE OIL AND GAS FIELD EXPLORATION SERVICES INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	344	330	(NA)
With 20 or more employees.....	...do.....	77	(NA)	(NA)
All employees:				
Number.....	Number.....	9,539	11,488	(NA)
Payroll.....	Thousand dollars..	43,601	49,467	(NA)
Production and development workers:				
Number.....	Number.....	7,496	10,010	(NA)
Man-hours.....	Thousands.....	16,718	23,978	(NA)
Wages.....	Thousand dollars..	31,080	40,813	(NA)
Value added in mining services.....	...do.....	64,295	81,301	(NA)
Cost of supplies, products purchased for resale, purchased fuel and electric energy, and subcontract work.....	...do.....	23,878	33,719	(NA)
Subcontract work only.....	...do.....	3,635	6,547	(NA)
Cost of purchased machinery installed.....	...do.....	6,073	6,537	(NA)
Receipts for services.....	...do.....	87,163	114,815	12,642
Capital expenditures.....	...do.....	7,083	6,742	(NA)

NA Not available.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Oil and Gas Field Exploration Services Industry represents establishments engaged primarily in geophysical, geological, and other exploration services for others on a contract, fee, or other basis.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Establishments classified in the Oil and Gas Field Contract Services Industries, in general, filed one report for all contract services performed in the United States and Alaska. These reports were classified on the basis of the principal kind of work performed and the principal State in which the service was performed.

RECEIPTS FOR SERVICES

The receipts reported by establishments classified in the Oil and Gas Field Exploration Services Industry consisted not only of services described above as primary to the industry, but also included receipts for secondary services (which are primary in other industries), value of a small amount of oil produced, and receipts for products purchased and resold without further processing at the establishment. The total receipts of establishments classified in the Oil and Gas Field Exploration Services Industry amounted to \$87.2 million. Of this total, \$84.0 million were services primary to the industry.

The total receipts for services for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary services of the industry by all contractors. The latter figure, appearing in table 3, indicates that the value of primary

services of this industry in 1958 was \$84.7 million. Of this total \$84.0 million or 99 percent represented services by establishments classified in the industry.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of secondary contract services for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with primary services statistics (table 3) which show receipts for these primary services by all establishments performing such services.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE OIL AND GAS FIELD EXPLORATION SERVICES INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

(In general, contractors prepared one report for all oil and gas field contract services performed in the United States and Alaska. These reports were classified on the basis of the principal kind of work and the principal State in which the service was performed)

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining services	Cost of supplies, products purchased for resale, purchased fuel and electric energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services	Capital expenditures	All employees, number	Value added in mining services
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	344	77	9,539	43,601	7,496	16,718	31,080	64,295	23,878	6,073	87,163	7,083	11,488	81,301
Middle Atlantic and East North Central..	13	1	106	391	79	140	313	893	143	44	1,033	47	(NA)	(NA)
West North Central..	19	2	212	1,143	182	376	921	1,874	1,213	62	3,077	72	(NA)	(NA)
Kansas.....	15	2	188	997	170	351	861	1,756	1,181	61	2,931	67	179	1,611
East South Central..	16	4	862	3,837	789	1,716	3,213	3,708	939	607	4,569	685	(NA)	(NA)
Mississippi.....	13	4	847	3,781	775	1,688	3,166	3,570	860	607	4,357	680	36	257
West South Central, total.....	210	56	7,359	33,082	5,585	12,382	22,466	48,026	15,927	4,356	63,092	5,217	(NA)	(NA)
Louisiana.....	32	16	3,400	13,981	2,414	4,856	8,446	19,023	4,225	2,078	22,670	2,656	1,454	8,893
Texas.....	148	34	3,573	17,184	2,904	6,779	12,533	26,160	9,948	2,210	35,886	2,432	6,597	47,812
Arkansas and Oklahoma.....	30	6	386	1,917	267	747	1,487	2,843	1,754	68	4,536	129	(NA)	(NA)
Mountain.....	67	11	796	4,023	689	1,714	3,218	8,099	4,813	899	12,854	957	(NA)	(NA)
Wyoming.....	18	2	203	909	179	427	733	1,834	468	67	2,266	103	(NA)	(NA)
Colorado.....	10	...	65	312	52	116	268	686	281	43	965	45	(NA)	(NA)
New Mexico.....	21	8	407	2,277	347	900	1,746	4,451	3,604	679	8,042	692	(NA)	(NA)
Utah.....	9	1	69	322	65	175	301	689	262	72	950	73	(NA)	(NA)
Pacific.....	19	3	204	1,125	172	390	949	1,695	843	105	2,538	105	(NA)	(NA)

NA Not available.

1958 CENSUS OF MINERAL INDUSTRIES

Table 3.—PRIMARY SERVICES OF THE OIL AND GAS FIELD EXPLORATION SERVICES INDUSTRY PERFORMED BY ALL MINERAL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

(In general, contractors prepared one report for all oil and gas field contract services performed in the United States and Alaska. These reports were classified on the basis of the principal State in which the service was performed. Separate data were contained in these reports for the various kinds of work performed)

Type of service, division, and State	Receipts for services (\$1,000)	
	1958	1954
United States, total:		
Oil and gas field exploration services, total.....	84,697	110,804
Geophysical exploration.....	78,591	91,883
Other exploration.....	6,106	18,921
Middle Atlantic and East North Central:		
Oil and gas field exploration services.....	1,046	10,947
West North Central:		
Oil and gas field exploration services.....	3,084	3,020
Kansas:		
Oil and gas field exploration services.....	2,939	2,564
East South Central:		
Oil and gas field exploration services.....	3,959	1,778
Mississippi:		
Oil and gas field exploration services.....	3,714	274
West South Central:		
Oil and gas field exploration services, total.....	62,273	84,998
Geophysical exploration.....	58,521	77,847
Other exploration.....	3,752	7,151
Louisiana:		
Oil and gas field exploration services.....	22,927	12,506
Texas:		
Oil and gas field exploration services, total.....	34,806	65,984
Geophysical exploration.....	31,805	59,238
Other exploration.....	3,001	6,746
Arkansas and Oklahoma:		
Oil and gas field exploration services.....	4,540	6,508
Mountain:		
Oil and gas field exploration services.....	11,908	8,733
Wyoming:		
Oil and gas field exploration services.....	2,258	3,911
New Mexico:		
Oil and gas field exploration services.....	7,100	1,083
Pacific:		
Oil and gas field exploration services.....	2,427	1,328

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-13D-3

OIL AND GAS FIELD SERVICES, N.E.C.

(S.I.C. CODE 1389)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts of the Oil and Gas Field Services, Not Elsewhere Classified, Industry were \$632.7 million, an increase of 16 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census Department of Commerce. Average employment in this industry showed an increase of 2 percent from 1954 to 1958 to a total of 47.2 thousand employees in 1958. Value added in mining in the industry amounted to \$454.9 million in 1958, an increase of 10 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, products purchased for resale, purchased fuels and electric energy, subcontract work, and purchased machinery from receipts for services and capital expenditures. It avoids the duplication in receipts for services which results from the use

of services of some establishments by other establishments. For this reason it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

During 1958, shipments of the Well Surveying, Well Logging, and Cementing Wells Services Subindustry were valued at \$220.6 million, an increase of 15 percent over 1954. Average employment in this subindustry showed an increase of 15 percent from 1954 to 1958 to a total of 12.1 thousand employees in 1958. Value added in mining in the subindustry amounted to \$167.2 million in 1958, an increase of 15 percent from 1954.

Table 1.—SUMMARY STATISTICS FOR THE OIL AND GAS FIELD SERVICES, N.E.C., INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958			1954			1939
		Total	Well surveying, well logging, and cementing wells services subindustry	Miscellaneous oil and gas field services subindustry	Total	Well surveying, well logging, and cementing wells services subindustry	Miscellaneous oil and gas field services subindustry	
Establishments:								
Total.....	Number.....	2,490	196	2,294	2,316	124	2,192	1,255
With 20 or more employees.....	...do.....	411	33	378	(NA)	(NA)	(NA)	(NA)
All employees:								
Number.....	Number.....	47,158	12,056	35,102	46,425	10,468	35,957	211,267
Payroll.....	Thousand dollars	227,366	74,810	152,556	187,867	53,733	134,134	214,989
Production and development workers:								
Number.....	Number.....	38,140	8,177	29,963	39,976	7,698	32,278	210,007
Man-hours.....	Thousands.....	85,918	20,754	65,164	90,081	23,934	66,147	213,950
Wages.....	Thousand dollars	167,327	45,178	122,149	147,047	33,846	113,201	211,815
Value added in mining services.....	...do.....	454,886	167,191	287,695	413,276	145,686	267,590	(NA)
Cost of supplies, products purchased for resale, purchased fuel and electric energy, and subcontract work.....	...do.....	181,494	54,963	126,531	138,394	53,038	85,306	(NA)
Subcontract work only.....	...do.....	9,770	166	9,604	9,731	1,429	8,302	(NA)
Cost of purchased machinery installed.....	...do.....	38,557	10,173	28,384	49,483	14,518	34,965	(NA)
Receipts for services.....	...do.....	632,705	220,613	412,092	543,460	191,336	352,124	46,790
Capital expenditures.....	...do.....	42,232	11,714	30,518	57,693	21,956	35,737	(NA)

NA Not available. ¹Represents number of operating companies. ²Excludes data for establishments primarily engaged in well surveying and well logging services. The total receipts for services by such establishments in 1939 was \$5,028 thousand.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.
Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

During 1958, shipments of the Miscellaneous Oil and Gas Field Services Subindustry were valued at \$412.1 million, an increase of 17 percent over 1954. Average employment in this subindustry showed a decrease of 2 percent from 1954 to 1958 to a total of 35.1 thousand employees in 1958. Value added in mining in the subindustry amounted to \$287.7 million in 1958, an increase of 8 percent from 1954.

The Oil and Gas Field Services, N.E.C. Industry represents establishments engaged primarily in performing oil and gas field services, not elsewhere classified, for others on a contract, fee or other basis, such as excavating slush pits and cellars; grading and building foundations at well locations; well surveying; running, cutting, and pulling casing, tubes, and rods; cementing wells; shooting wells; perforating well casing; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

In tables 1 and 2 separate figures are given for establishments classified in the Well Surveying, Well Logging, and Cementing Wells Services Subindustry and the Miscellaneous Oil and Gas Field Services Subindustry.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Establishments classified in the oil and gas field services industries, in general, filed one report for all contract services performed in the United States and Alaska. These reports were classified on the basis of the principal kind of work performed and the principal State in which the service was performed.

RECEIPTS FOR SERVICES

The receipts reported by establishments classified in the Oil and Gas Field Services, N.E.C. Industry consisted not only of services described above as primary to the industry, but also included receipts for secondary services (which are primary in other industries), receipts for oil and gas produced, and receipts for products purchased and resold without further processing at the establishment. The total receipts of establishments classified in the Oil and Gas Field Services, N.E.C. Industry amounted to \$632.7 million. Of this total, the receipts for services primary to the industry figure is not available at the time of this preliminary release. However, for establishments classified in the Well Surveying, Well Logging, and Cementing Wells Services Subindustry the total receipts amounted to \$220.6 million, of which \$152.5 million were services primary to the subindustry. For establishments classified in

the Miscellaneous Oil and Gas Field Services Subindustry the total receipts amounted to \$412.1 million, of which \$335.8 million were services primary to the subindustry.

The total receipts for services for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary services of the industry by all contractors. The latter figure, appearing in table 3, indicates that receipts for primary services of this industry in 1958 were \$576.0 million. Of this total, receipts for services primary to the Well Surveying, Well Logging, and Cementing Wells Subindustry were \$180.1 million and receipts for services primary to the Miscellaneous Oil and Gas Field Services Subindustry were \$395.9 million. For these subindustries, in each case, total receipts for primary products represented by establishments classified in the subindustry were 85 percent of the total receipts for such services by all establishments performing such services.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of secondary contract services for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with primary services statistics (table 3) which show receipts for these primary services by all establishments performing such services.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE OIL AND GAS FIELD SERVICES, N.E.C., INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954
(In general, contractors prepared one report for all oil and gas field contract services performed in the United States and Alaska. These reports were classified on the basis of the principal kind of work and the principal State in which the service was performed.)

Division, State, and subindustry	1958										1954			
	Establishments, number		All employees		Production and development workers			Value added in mining services (\$1,000)	Cost of supplies, products purchased for resale, fuel and electric energy and subcontract work (\$1,000)	Cost of purchased machinery in industry and stockpiled (\$1,000)	Receipts for services (\$1,000)	Capital expenditures (\$1,000)	All employees, number	Value added in mining services (\$1,000)
	Total	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours	Wages (\$1,000)							
UNITED STATES:	2,490	411	47,158	257,366	38,140	85,918	167,327	454,886	181,494	38,557	632,705	42,232	46,425	413,276
Oil and gas field services, n.e.c., industry, total.....	196	33	12,056	74,810	8,177	20,754	45,178	167,191	54,963	10,173	220,613	11,714	10,468	145,686
Well surveying, well logging, and cementing wells services subindustry.....	2,294	378	35,102	152,556	29,963	65,164	122,149	287,695	126,531	28,384	412,092	30,518	35,957	267,590
Miscellaneous oil and gas field services subindustry.....	494	33	3,227	12,472	2,930	6,267	11,076	23,059	8,219	1,746	31,166	1,858	(NA)	(NA)
Oil and gas field services, n.e.c., industry, total.....	25	5	354	1,875	301	716	1,442	3,584	2,048	381	5,712	301	(NA)	(NA)
Well surveying, well logging, and cementing wells services subindustry.....	469	28	2,873	10,597	2,629	5,551	9,634	19,475	6,171	1,365	25,454	1,557	(NA)	(NA)
Miscellaneous oil and gas field services subindustry..	227	15	1,483	5,703	1,358	2,940	5,106	11,047	3,731	938	14,667	1,049	(NA)	(NA)
Oil and gas field services, n.e.c., industry, total.....	8	1	100	571	83	228	410	1,228	776	118	2,006	116	61	655
Well surveying, well logging, and cementing wells services subindustry.....	219	14	1,383	5,132	1,275	2,712	4,696	9,819	2,955	820	12,661	933	(NA)	(NA)
Miscellaneous oil and gas field services subindustry..	37	...	129	380	114	185	323	872	460	45	1,354	23	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....	62	17	976	3,250	887	1,773	2,980	6,172	2,552	579	8,747	556	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....	34	10	608	2,023	551	1,185	1,889	4,014	1,420	451	5,482	403	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....	1,536	307	38,863	192,111	30,767	70,658	136,961	387,449	158,602	32,955	542,353	36,653	(NA)	(NA)
Oil and gas field services, n.e.c., industry, total.....	133	25	11,397	71,251	7,630	19,444	42,396	160,214	51,922	9,659	210,525	11,270	(NA)	(NA)
Well surveying, well logging, and cementing wells services subindustry.....	1,403	282	27,466	120,860	23,137	51,214	94,565	227,235	106,680	23,296	331,828	25,383	(NA)	(NA)
Miscellaneous oil and gas field services subindustry..	196	66	6,252	28,368	5,629	13,552	22,981	49,424	34,416	6,836	83,248	7,428	4,755	34,148
Oil and gas field services, n.e.c., industry, total.....	19	6	497	2,894	409	932	1,999	5,108	2,087	395	6,790	800	263	2,430
Well surveying, well logging, and cementing wells services subindustry.....	177	60	5,755	25,474	5,220	12,620	20,982	44,316	32,329	6,441	76,458	6,628	4,492	31,718
Miscellaneous oil and gas field services subindustry..	965	193	28,603	147,306	22,168	51,289	103,683	314,537	116,879	24,420	428,538	27,298	28,251	286,127
Oil and gas field services, n.e.c., industry, total.....	74	14	9,922	62,433	6,974	17,962	39,256	152,218	48,838	9,119	199,861	10,314	9,235	134,445
Well surveying, well logging, and cementing wells services subindustry.....	891	179	18,681	84,873	15,194	33,327	64,427	162,319	68,041	15,301	228,677	16,984	19,016	151,682
Miscellaneous oil and gas field services subindustry..	375	48	4,008	16,437	2,970	5,817	10,297	23,488	7,307	1,699	30,567	1,927	(NA)	(NA)
Oil and gas field services, n.e.c., industry, total.....	40	5	978	5,924	247	550	1,141	2,888	997	145	3,874	156	(NA)	(NA)
Well surveying, well logging, and cementing wells services subindustry.....	335	43	3,030	10,513	2,723	5,267	9,156	20,600	6,310	1,554	26,693	1,771	(NA)	(NA)
Miscellaneous oil and gas field services subindustry..	211	32	2,060	9,194	1,833	3,997	7,805	18,696	5,068	2,037	23,691	2,110	(NA)	(NA)
Oil and gas field services, n.e.c., industry, total.....	16	1	101	430	84	177	372	916	200	50	1,108	58	(NA)	(NA)
Well surveying, well logging, and cementing wells services subindustry.....	195	31	1,959	8,764	1,749	3,820	7,433	17,780	4,868	1,987	22,583	2,052	(NA)	(NA)
Miscellaneous oil and gas field services subindustry..	35	4	285	1,351	246	542	1,194	2,849	1,065	321	3,890	345	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....	102	18	1,125	4,687	1,016	2,129	3,944	9,789	2,256	1,004	12,003	1,046	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....	12	3	135	657	124	297	589	1,381	583	229	1,948	245	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....	150	22	1,903	9,959	1,609	3,038	8,182	18,638	6,593	1,195	25,394	1,032	(NA)	(NA)
Oil and gas field services, n.e.c., industry.....														

NA Not available. ¹Represents miscellaneous oil and gas field services only.

(In general, contractors prepared one report for all oil and gas field contract services performed in the United States and Alaska. These reports were classified on the basis of the principal State in which the service was performed. Separate data were obtained in these reports for the various kinds of work performed)

USCOMM--DC

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

April 1960

MIC(P)-14B

DIMENSION STONE

(S.I.C. Code 1411)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of Dimension Stone Quarries, including Associated Dressing Plants, were valued at \$89.3 million, an increase of 13 percent over 1954, according to preliminary results obtained from the 1958 Censuses of Manufactures and Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment at these quarries and dressing plants showed a decrease of one percent from 1954 to 1958 to a total of 12.2 thousand employees in 1958. Value added in quarrying and dressing at these operations amounted to \$67.1 million in 1958, an increase of 9 percent from 1954 when the previous censuses were taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not

only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

The above figures include data for both separately operated quarries, which are classified in the mineral industry, Dimension Stone, and quarries with dressing plants which are included as part of the manufacturing industry, Cut Stone and Stone Products. The value of shipments of separately operated dimension stone quarries in 1958 was \$15.7 million, a decrease of 17 percent from 1954; and the value of shipments of dimension stone quarries with dressing plants was \$73.6 million, an increase of 23 percent from 1954.

Table 1A.—SUMMARY STATISTICS FOR ALL DIMENSION STONE QUARRIES IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958			1954		
		Total	Quarries only	Quarries with dressing plants	Total	Quarries only	Quarries with dressing plants
Establishments:							
Total.....	Number.....	554	332	222	555	351	204
With 20 or more employees.....	...do.....	121	29	92	129	47	82
All employees:							
Number.....	Number.....	12,240	2,319	9,921	12,325	3,224	9,101
Payroll.....	Thousand dollars..	44,865	7,171	37,694	40,227	8,625	31,602
Production and development workers:							
Number.....	Number.....	10,822	2,052	8,770	11,389	3,068	8,321
Man-hours.....	Thousands.....	20,720	3,731	16,989	23,155	5,893	17,262
Wages.....	Thousand dollars..	36,704	6,003	30,701	35,364	7,938	27,426
Value added in quarrying and dressing..	...do.....	67,054	12,999	54,055	61,774	15,155	46,619
Cost of supplies, rough stone received for dressing, purchased fuel and electric energy, and contract work..	...do.....	23,137	3,405	19,732	17,321	3,846	13,475
Rough stone received for dressing only.....	...do.....	3,541	...	3,541	1,512	...	1,512
Contract work only.....	...do.....	1,876	782	1,094	1,208	574	634
Cost of purchased machinery installed..	...do.....	2,894	580	2,314	2,664	891	1,773
Value of shipments and receipts.....	...do.....	89,337	15,740	73,597	78,903	18,945	59,958
Value of net shipments and receipts.....	...do.....	85,796	15,740	70,056	77,391	18,945	58,446
Capital expenditures.....	...do.....	3,748	1,244	2,504	2,856	947	1,909



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.
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The Dimension Stone Industry represents establishments engaged primarily in mining or quarrying dimension stone. Also included are establishments primarily engaged in producing rough blocks and slabs. Establishments primarily engaged in mining or quarrying and shaping grindstones, pulpstones, millstones, burrstones, and sharpening stones are classified in Industry 1497; and those mining or quarrying dimension soapstone, in Industry 1496. Establishments primarily engaged in dressing (shaping, polishing, or otherwise finishing) rough blocks and slabs are classified in Industry 3281, Cut Stone and Stone Products. Nepheline syenite operations are classified in Industry 1459. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

Separate statistics are shown in tables 1B, 1C, 1D, and 2 for dimension limestone quarries, dimension granite quarries, and dimension miscellaneous stone quarries. The figures for limestone include such related rocks as dolomite, travertine, and calcareous tufa. Those for granite include such related rocks as gneiss, syenite, diorite, and gabbro. The miscellaneous stones figures include data for slate, marble, trap rock, sandstone, and other stones. For 1958, the value of shipments of limestone quarries and associated dressing plants was \$20.6 million, an increase of one percent from 1954; the value of shipments of such granite operations was \$34.4 million; an increase of 21 percent from 1954; and the value of shipments of such miscellaneous stone operations was \$34.4 million, an increase of 15 percent from 1954.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Dimension Stone Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Dimension Stone Industry amounted to \$15.7 million. Of this total, \$14.8 million were products primary to the industry, \$0.9 million were products primary to other industries, chiefly crushed and broken stone and receipts for contract services.

The total value of shipments for the industry which is the total value of receipts of

establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that the value of rough dimension stone shipped by all quarries was \$18.6 million. Of this total, \$14.8 million or 80 percent were shipped by establishments classified in the Dimension Stone Industry while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The gross value of shipments of all quarries and associated dressing plants was \$89.3 million, and the net value of shipments of such operations was \$85.8 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1B.—SUMMARY STATISTICS FOR DIMENSION LIMESTONE QUARRIES IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958			1954		
		Total	Quarries only	Quarries with dressing plants	Total	Quarries only	Quarries with dressing plants
Establishments:							
Total.....	Number.....	127	73	54	106	65	41
With 20 or more employees.....	..do.....	27	8	19	29	11	18
All employees:							
Number.....	Number.....	2,644	599	2,055	2,850	500	2,350
Payroll.....	Thousand dollars..	10,805	2,197	8,608	10,359	1,556	8,803
Production and development workers:							
Number.....	Number.....	2,350	514	1,836	2,693	472	2,221
Man-hours.....	Thousands.....	4,237	920	3,317	5,391	872	4,519
Wages.....	Thousand dollars..	8,882	1,645	7,237	9,479	1,429	8,050
Value added in quarrying and dressing..	..do.....	16,533	3,923	12,610	16,686	2,942	13,744
Cost of supplies, rough stone received for dressing, purchased fuel and electric energy, and contract work...	..do.....	4,278	671	3,607	3,717	779	2,938
Rough stone received for dressing only.....	..do.....	130	...	130	75	...	75
Cost of purchased machinery installed..	..do.....	878	336	542	862	158	704
Value of shipments and receipts.....	..do.....	20,603	4,407	16,196	20,493	3,754	16,739
Value of net shipments and receipts....	..do.....	20,473	4,407	16,066	20,418	3,754	16,664
Capital expenditures.....	..do.....	1,086	523	563	772	125	647

Table 1C.—SUMMARY STATISTICS FOR DIMENSION GRANITE QUARRIES IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958			1954		
		Total	Quarries only	Quarries with dressing plants	Total	Quarries only	Quarries with dressing plants
Establishments:							
Total.....	Number.....	137	76	61	143	86	57
With 20 or more employees.....	..do.....	47	12	35	44	15	29
All employees:							
Number.....	Number.....	3,894	737	3,157	4,009	967	3,042
Payroll.....	Thousand dollars..	15,590	2,255	13,335	13,701	2,639	11,062
Production and development workers:							
Number.....	Number.....	3,463	679	2,784	3,662	917	2,745
Man-hours.....	Thousands.....	6,733	1,279	5,454	7,445	1,769	5,676
Wages.....	Thousand dollars..	12,617	2,018	10,599	11,806	2,404	9,402
Value added in quarrying and dressing..	..do.....	24,260	4,030	20,230	20,976	4,590	16,386
Cost of supplies, rough stone received for dressing, purchased fuel and electric energy, and contract work...	..do.....	10,228	1,619	8,609	7,561	1,167	6,394
Rough stone received for dressing only.....	..do.....	2,153	...	2,153	765	...	765
Cost of purchased machinery installed..	..do.....	618	125	493	826	226	600
Value of shipments and receipts.....	..do.....	34,384	5,553	28,831	28,498	5,738	22,760
Value of net shipments and receipts....	..do.....	32,231	5,553	26,678	27,733	5,738	21,995
Capital expenditures.....	..do.....	722	221	501	865	245	620

Table 1D.—SUMMARY STATISTICS FOR DIMENSION MISCELLANEOUS STONE QUARRIES IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958			1954		
		Total	Quarries only	Quarries with dressing plants	Total	Quarries only	Quarries with dressing plants
Establishments:							
Total.....	Number.....	290	183	107	306	200	106
With 20 or more employees.....	..do.....	47	9	38	56	21	35
All employees:							
Number.....	Number.....	5,702	963	4,739	5,466	1,757	3,709
Payroll.....	Thousand dollars..	18,470	2,634	15,836	16,167	4,430	11,737
Production and development workers:							
Number.....	Number.....	5,009	862	4,147	5,034	1,679	3,355
Man-hours.....	Thousands.....	9,750	1,537	8,213	10,319	3,252	7,067
Wages.....	Thousand dollars..	15,205	2,348	12,857	14,079	4,105	9,974
Value added in quarrying and dressing..	..do.....	26,261	5,081	21,180	24,112	7,623	16,489
Cost of supplies, rough stone received for dressing, purchased fuel and electric energy, and contract work...	..do.....	8,631	1,129	7,502	6,043	1,900	4,143
Rough stone received for dressing only.....	..do.....	1,258	...	1,258	672	...	672
Cost of purchased machinery installed..	..do.....	1,398	129	1,269	976	507	469
Value of shipments and receipts.....	..do.....	34,350	5,827	28,523	29,912	9,453	20,459
Value of net shipments and receipts....	..do.....	33,092	5,827	27,265	29,240	9,453	19,787
Capital expenditures.....	..do.....	1,940	512	1,428	1,219	577	642

Table 2.—GENERAL STATISTICS FOR DIMENSION STONE QUARRIES, BY SUBINDUSTRIES, DIVISIONS, AND STATES: 1958 AND 1954

Subindustry, division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in quarrying and dressing	Cost of supplies, rough stone received for dressing, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of shipments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in quarrying and dressing
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
ALL DIMENSION STONE QUARRIES														
United States, total.....	554	121	12,240	44,865	10,822	20,720	36,704	67,054	23,137	2,894	89,337	3,748	12,325	61,774
Quarries only...	332	29	2,296	7,075	2,052	3,731	6,003	12,999	3,405	580	15,740	1,244	3,224	15,155
Quarries with dressing plants	222	92	9,944	37,790	8,770	16,989	30,701	54,055	19,732	2,314	73,597	2,504	9,101	46,619
New England, total..	55	18	2,831	11,771	2,393	4,912	9,236	14,930	5,110	662	19,890	812	2,268	12,806
Quarries only...	18	1	204	803	186	360	694	1,043	369	34	1,333	113	(NA)	(NA)
Quarries with dressing plants	37	17	2,627	10,968	2,207	4,552	8,542	13,887	4,741	628	18,557	699	(NA)	(NA)
Maine.....	6	4	217	729	202	411	655	816	376	36	1,188	40	317	1,494
Vermont.....	27	10	1,963	7,547	1,648	3,411	6,034	9,751	3,034	506	12,672	619	1,132	6,842
Middle Atlantic, total.....	107	16	1,097	3,813	989	1,890	3,255	6,095	1,711	307	7,739	374	1,248	5,827
Quarries only...	59	2	271	875	245	467	778	1,654	304	62	1,931	89	258	1,289
Quarries with dressing plants	48	14	826	2,938	744	1,423	2,477	4,441	1,407	245	5,808	285	990	4,538
Pennsylvania, total	75	13	820	2,975	748	1,435	2,539	4,311	1,009	131	5,266	185	958	4,187
Quarries only...	44	2	195	628	174	323	545	1,162	251	26	1,374	65	203	909
Quarries with dressing plants	31	11	625	2,347	574	1,112	1,994	3,149	758	105	3,892	120	755	3,278
East North Central, total.....	92	25	2,560	10,395	2,293	4,113	8,667	15,575	3,860	799	19,284	950	3,208	18,551
Quarries only...	57	8	574	2,193	505	923	1,692	3,658	712	203	4,245	328	(NA)	(NA)
Quarries with dressing plants	35	17	1,986	8,202	1,788	3,190	6,975	11,917	3,148	596	15,039	622	(NA)	(NA)
Ohio.....	12	2	326	1,087	299	547	970	1,669	466	16	2,129	22	802	4,166
Indiana, total.....	28	16	1,760	7,490	1,568	2,791	6,110	11,155	2,160	602	13,208	709	1,912	11,740
Quarries only...	16	7	391	1,701	334	637	1,236	2,707	437	159	3,056	247	272	1,858
Quarries with dressing plants	12	9	1,369	5,789	1,234	2,154	4,874	8,448	1,723	443	10,152	462	1,640	9,882
Wisconsin.....	38	7	399	1,653	355	667	1,426	2,417	1,140	168	3,518	207	461	2,435
Quarries with dressing plants	18	6	306	1,384	270	517	1,191	1,895	969	135	2,864	135	262	1,334
West North Central, total.....	53	15	1,686	6,987	1,482	3,140	5,453	10,807	5,421	229	16,220	237	1,487	7,480
Quarries only...	31	4	178	500	156	304	415	1,025	391	25	1,410	31	(NA)	(NA)
Quarries with dressing plants	22	11	1,508	6,487	1,326	2,836	5,038	9,782	5,030	204	14,810	206	(NA)	(NA)
Minnesota.....	22	9	969	4,343	849	1,867	3,351	6,684	3,006	45	9,687	48	804	3,997
Quarries with dressing plants	7	6	884	4,141	772	1,711	3,165	6,306	2,760	36	9,066	36	754	3,785
Missouri.....	12	2	460	1,714	399	843	1,315	2,440	1,615	98	4,051	102	416	1,918
South Dakota.....	6	2	152	624	141	294	521	1,235	564	54	1,798	55	194	1,192
Quarries with dressing plants	3	1	123	537	113	238	436	816	496	54	1,312	54	(NA)	(NA)
South Atlantic, total.....	69	23	1,964	5,608	1,759	3,200	4,678	8,288	2,879	415	11,079	503	1,877	7,493
Quarries only...	42	6	415	1,011	375	638	907	1,795	687	45	2,423	104	(NA)	(NA)
Quarries with dressing plants	27	17	1,549	4,597	1,384	2,562	3,771	6,493	2,192	370	8,656	399	(NA)	(NA)
North Carolina....	11	4	495	1,427	439	800	1,188	2,182	665	71	2,839	79	387	1,511
Quarries with dressing plants	6	4	481	1,397	427	786	1,161	2,123	660	71	2,779	75	338	1,369
Georgia, total....	34	15	1,106	3,269	1,002	1,860	2,749	4,751	1,967	303	6,665	356	1,071	4,516
Quarries only...	23	4	266	664	250	434	624	1,147	590	21	1,710	48	366	1,630
Quarries with dressing plants	11	11	840	2,605	752	1,426	2,125	3,604	1,377	282	4,955	308	705	2,886
East South Central, total.....	45	13	1,277	3,622	1,178	2,197	3,125	6,074	1,728	268	7,657	413	1,440	5,745
Quarries only...	33	5	304	727	281	464	671	1,304	297	125	1,477	249	(NA)	(NA)
Quarries with dressing plants	12	8	973	2,895	897	1,733	2,454	4,770	1,431	143	6,180	164	(NA)	(NA)
Tennessee.....	36	11	997	2,668	924	1,689	2,312	4,170	1,185	242	5,237	360	1,024	3,851
Alabama.....	6	2	276	944	251	505	805	1,867	540	26	2,396	37	(NA)	(NA)

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR DIMENSION STONE QUARRIES, BY SUBINDUSTRIES, DIVISIONS, AND STATES: 1958 AND 1954—Continued

Subindustry, division, and State	1958												1954	
	Establis- ments, number		All employees		Production and development workers			Value added in quarrying and dressing	Cost of supplies, rough stone received for dressing, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of shipments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in quarrying and dressing
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
ALL DIMENSION STONE QUARRIES—Continued														
West South Central, total.....	44	9	534	1,579	467	764	1,325	2,758	1,646	77	4,389	92	472	2,072
Quarries only...	29	3	204	491	173	303	416	1,043	277	44	1,299	65	(NA)	(NA)
Quarries with dressing plants	15	6	330	1,088	294	461	909	1,715	1,369	33	3,090	27	(NA)	(NA)
Texas.....	15	5	295	1,047	254	437	844	1,866	1,287	46	3,151	48	311	1,474
Mountain, total.....	46	...	117	339	104	209	296	875	285	61	966	255	194	968
Quarries only...	36	...	78	220	70	146	192	698	138	16	648	204	(NA)	(NA)
Quarries with dressing plants	10	...	39	119	34	63	104	177	147	45	318	51	(NA)	(NA)
Pacific, total.....	43	2	174	751	157	295	669	1,652	497	76	2,113	112	131	832
Quarries only...	27	...	68	255	61	126	238	779	230	26	974	61	(NA)	(NA)
Quarries with dressing plants	16	2	106	496	96	169	431	873	267	50	1,139	51	(NA)	(NA)
California.....	31	1	119	486	107	198	435	1,122	374	55	1,462	89	65	454
DIMENSION LIMESTONE QUARRIES														
United States, total.....	127	27	2,644	10,805	2,350	4,237	8,882	16,533	4,278	878	20,603	1,086	2,850	16,686
Quarries only...	71	8	596	2,186	511	915	1,637	3,888	657	326	4,360	511	500	2,942
Quarries with dressing plants	56	19	2,048	8619	1,839	3,322	7,245	12,645	3,621	552	16,243	575	2,350	13,744
Middle Atlantic.....	15	...	51	153	44	78	137	449	124	39	568	44	55	298
East North Central, total.....	50	18	1,944	8,436	1,737	3,145	6,978	12,435	2,978	577	15,286	704	1,249	114,826
Quarries only...	28	6	381	1,613	331	618	1,192	2,681	410	169	2,983	277	1396	12,484
Quarries with dressing plants	22	12	1,563	6,823	1,406	2,527	5,786	9,754	2,568	408	12,303	427	1,202	112,342
Indiana.....	23	14	1,674	7,190	1,491	2,679	5,886	10,656	2,020	436	12,569	543	1,862	11,399
Wisconsin.....	20	4	248	1,201	223	436	1,042	1,703	917	133	2,595	158	294	1,726
Quarries with dressing plants	12	4	232	1,160	208	415	1,005	1,581	886	131	2,467	131	178	1,036
West North Central.. Quarries with dressing plants	23	5	302	1,145	256	470	849	1,586	555	61	2,141	61	(1)	(1)
Minnesota.....	7	3	180	771	153	328	567	1,104	319	30	1,423	30	143	1,100
South Atlantic.....	10	...	36	105	32	47	91	179	61	14	241	13	367	1,456
South Central.....	18	4	288	899	260	461	767	1,689	474	159	2,092	230	9	106
West.....	11	...	23	67	21	36	60	195	86	28	275	34	9	106
DIMENSION GRANITE QUARRIES														
United States, total.....	137	47	3,894	15,590	3,463	6,733	12,617	24,260	10,228	618	34,384	722	4,009	20,976
Quarries only...	76	12	737	2,255	679	1,279	2,013	4,030	1,619	125	5,553	221	967	4,590
Quarries with dressing plants	61	35	3,157	13,335	2,784	5,454	10,599	20,230	8,609	493	28,831	501	3,042	16,386
New England, total.. Quarries only...	28	12	1,225	5,927	1,074	2,135	4,709	8,808	2,888	232	11,639	289	1,535	9,624
Quarries with dressing plants	11	1	156	658	143	274	563	925	329	22	1,197	79	199	1,094
Quarries with dressing plants	17	11	1,069	5,269	931	1,861	4,146	7,883	2,559	210	10,442	210	1,336	8,530
Middle Atlantic.....	8	...	34	130	33	63	127	267	70	26	356	7	94	535
East North Central.. total.....	11	3	153	461	132	227	386	717	218	36	932	39	(2)	(2)
Quarries only...	22	9	983	4,320	875	1,908	3,396	7,021	3,303	79	10,320	83	2,103	24,875
Quarries with dressing plants	15	4	95	262	87	176	245	752	311	7	1,059	11	220	2,102
Minnesota.....	7	5	888	4,058	788	1,732	3,151	6,269	2,992	72	9,261	72	2819	23,852
South Dakota.....	15	6	789	3,572	696	1,539	2,784	5,580	2,687	15	8,264	18	661	2,397
South Dakota.....	6	2	152	624	141	294	521	1,235	564	54	1,798	55	194	1,192
South Atlantic, total.....	42	17	1,118	3,313	1,005	1,777	2,760	5,026	2,123	185	7,103	231	1,270	3,608
Quarries only...	26	5	319	810	297	531	734	1,394	638	25	2,000	57	3486	2,093
Quarries with dressing plants	16	12	799	2,503	708	1,246	2,026	3,632	1,485	160	5,103	174	784	3,515
Georgia.....	28	14	636	1,880	579	1,001	1,577	2,868	1,468	120	4,299	157	687	2,940

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR DIMENSION STONE QUARRIES, BY SUBINDUSTRIES, DIVISIONS, AND STATES: 1958 AND 1954—Continued

Subindustry, division, and State	1958												1954	
	Establish- ments, number		All employees		Production and development workers			Value added in quarrying and dressing	Cost of supplies, rough stone received for dressing, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of shipments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in quarrying and dressing
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
DIMENSION GRANITE QUARRIES—Continued														
South Central.....	10	5	288	1,037	259	462	877	1,717	1,371	31	3,086	33	(³)	(³)
Quarries with dressing plants	5	4	237	901	213	363	754	1,437	1,258	31	2,701	25	(³)	(³)
West.....	16	1	93	402	85	161	362	704	255	29	948	40	71	334
DIMENSION MISCEL- LANEOUS STONE QUARRIES														
United States, total.....	290	47	5,702	18,470	5,009	9,750	15,205	26,261	8,631	1,398	34,350	1,940	5,466	24,112
Quarries only...	185	9	963	2,634	862	1,537	2,348	5,081	1,129	129	5,827	512	1,757	7,623
Quarries with dressing plants	105	38	4,739	15,836	4,147	8,213	12,857	21,180	7,502	1,269	28,523	1,428	3,709	16,489
New England.....	27	6	1,606	5,844	1,319	2,777	4,527	6,122	2,222	430	8,251	523	} (NA)	} (NA)
Quarries with dressing plants	20	6	1,558	5,699	1,276	2,691	4,396	6,004	2,182	418	8,115	489		
Vermont.....	21	5	1,506	5,522	1,228	2,616	4,257	5,732	1,969	425	7,636	490		
Middle Atlantic, total.....	84	16	1,012	3,530	912	1,749	2,991	5,379	1,517	242	6,815	323		
Quarries only...	44	2	212	672	194	373	594	1,179	226	31	1,362	74		
Quarries with dressing plants	40	14	800	2,858	718	1,376	2,397	4,200	1,291	211	5,453	249		
New York.....	23	3	241	707	206	393	587	1,441	618	134	2,031	162		
Quarries with dressing plants	13	3	183	529	152	276	421	1,086	585	129	1,648	152		
Pennsylvania.....	61	13	771	2,823	706	1,356	2,404	3,938	899	108	4,784	161		
Quarries with dressing plants	27	11	617	2,329	566	1,100	1,976	3,114	706	82	3,805	97		
East North Central..	31	4	463	1,498	424	741	1,303	2,423	664	186	3,066	207		
Quarries with dressing plants	9	3	346	1,140	318	554	992	1,817	501	183	2,311	190		
West North Central..	8	1	401	1,522	351	762	1,208	2,200	1,563	89	3,759	93		
South Atlantic.....	17	6	810	2,190	722	1,376	1,827	3,083	695	216	3,735	259		
Quarries with dressing plants	7	5	731	2,021	659	1,285	1,680	2,754	655	196	3,393	212		
East South Central, total.....	38	12	1,116	3,057	1,026	1,904	2,627	5,010	1,440	132	6,363	219		
Quarries only...	28	5	275	667	255	418	617	1,159	268	15	1,361	81		
Quarries with dressing plants	10	7	841	2,390	771	1,486	2,010	3,851	1,172	117	5,002	138		
West South Central..	23	1	119	208	100	134	179	416	89	23	505	23		
Mountain.....	41	...	98	269	87	168	231	767	221	54	805	237		
Pacific.....	21	1	77	352	68	139	312	861	220	26	1,051	56		

NA Not available.

¹Data for West North Central are included with those for East North Central.²Data for East North Central are included with those for West North Central.³Data for South Central are included with those for South Atlantic.

Table 3.—PRIMARY PRODUCTS OF DIMENSION STONE QUARRIES SHIPPED BY ALL QUARRIES AND ASSOCIATED DRESSING PLANTS,
BY DIVISIONS AND STATES: 1958 AND 1954

Product, division, and State	Total shipments including interplant transfers			
	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
UNITED STATES				
All dimension stone (net shipments), total ¹	2,909	80,539	2,948	73,695
Rough dimension stone:				
Net shipments ¹	1,614	18,593	1,989	26,925
Gross shipments.....	1,732	22,134	2,047	28,418
Dressed dimension stone.....	1,295	61,946	959	46,770
Limestone (net shipments), total ¹	1,129	18,331	1,246	19,985
Rough dimension stone:				
Net shipments ¹	705	7,009	868	7,180
Gross shipments.....	717	7,139	876	7,255
Dressed dimension stone.....	424	11,322	378	12,805
Granite (net shipments), total ¹	807	29,827	738	26,691
Rough dimension stone:				
Net shipments ¹	333	3,711	511	9,620
Gross shipments.....	410	5,864	537	10,385
Dressed dimension stone.....	474	26,116	227	17,071
Slate, marble, sandstone, trap rock, and miscellaneous stone (net shipments), total ¹	973	32,381	964	27,019
Rough dimension stone:				
Net shipments ¹	576	7,873	610	10,125
Gross shipments.....	605	9,131	634	10,778
Dressed dimension stone.....	397	24,508	354	16,894
NEW ENGLAND				
All dimension stone (net shipments) ¹	530	18,040		
Rough dimension stone (net shipments) ¹	169	1,192		
Dressed dimension stone.....	361	16,848		
Granite (net shipments) ¹	423	11,123		
Rough dimension stone (net shipments) ¹	149	1,074		
Dressed dimension stone.....	274	10,049		
Limestone and other stone (net shipments) ¹	107	6,917		
Rough dimension stone (net shipments) ¹	20	118		
Dressed dimension stone.....	87	6,799		
Maine				
All dimension stone (net shipments) ¹	37	1,169		
Vermont				
All dimension stone (net shipments) ¹	337	11,114		
Massachusetts				
All dimension stone (net shipments) ¹	138	4,287		
MIDDLE ATLANTIC				
All dimension stone (net shipments) ¹	436	7,165		
Rough dimension stone (net shipments) ¹	308	2,793		
Dressed dimension stone.....	128	4,372	(NA)	(NA)
New York				
All dimension stone (net shipments) ¹	108	2,109		
Pennsylvania				
All dimension stone (net shipments) ¹	303	4,975		
Rough dimension stone (net shipments) ¹	194	1,372		
Dressed dimension stone.....	109	3,603		
EAST NORTH CENTRAL				
All dimension stone (net shipments) ¹	990	19,852		
Rough dimension stone (net shipments) ¹	566	7,174		
Dressed dimension stone.....	424	12,678		
Limestone (net shipments) ¹	767	13,403		
Rough dimension stone (net shipments) ¹	435	5,182		
Dressed dimension stone.....	332	8,221		
Granite and other stone (net shipments) ¹	223	6,449		
Rough dimension stone (net shipments) ¹	131	1,992		
Dressed dimension stone.....	92	4,457		
Ohio				
All dimension stone (net shipments) ¹	115	3,588		

See footnotes at end of table.

Table 3.—PRIMARY PRODUCTS OF DIMENSION STONE QUARRIES SHIPPED BY ALL QUARRIES AND ASSOCIATED DRESSING PLANTS,
BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	Total shipments including interplant transfers			
	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
EAST NORTH CENTRAL—Continued				
Indiana				
All dimension stone (net shipments) ¹	743	17,427		
Rough dimension stone (net shipments) ¹	423	5,455		
Dressed dimension stone.....	320	7,972		
Wisconsin				
All dimension stone (net shipments) ¹	97	2,393		
WEST NORTH CENTRAL				
All dimension stone (net shipments) ¹	190	12,911		
Limestone (net shipments) ¹	126	2,051		
Granite (net shipments) ¹	44	5,417		
Other stone (net shipments) ¹	20	2,443		
Minnesota				
All dimension stone (net shipments) ¹	71	7,793		
South Dakota				
All dimension stone (net shipments) ¹	15	1,799		
SOUTH ATLANTIC				
All dimension stone (net shipments) ¹	340	9,786		
Rough dimension stone (net shipments) ¹	168	2,872		
Dressed dimension stone.....	172	6,914		
Granite (net shipments) ¹	245	5,911		
Limestone and other stone (net shipments) ¹	95	3,875		
North Carolina				
All dimension stone (net shipments) ¹	89	2,185	(NA)	(NA)
Georgia				
All dimension stone (net shipments) ¹				
EAST SOUTH CENTRAL				
All dimension stone (net shipments) ¹	164	8,710		
Rough dimension stone (net shipments) ¹	125	2,120		
Dressed dimension stone.....	39	4,590		
Tennessee				
All dimension stone (net shipments) ¹	125	5,111		
WEST SOUTH CENTRAL				
All dimension stone (net shipments) ¹	123	3,237		
Granite (net shipments) ¹	37	2,111		
Limestone and other stone (net shipments) ¹	86	1,084		
Texas				
All dimension stone (net shipments) ¹	68	2,183		
MOUNTAIN				
All dimension stone (net shipments) ¹	53	990		
PACIFIC				
All dimension stone (net shipments) ¹	85	1,938		
California				
All dimension stone (net shipments) ¹	53	1,424		

NA Not available.

¹Represents gross shipments less rough stone received from other establishments for dressing.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

May 1960

MIC(P)-14C

CRUSHED AND BROKEN STONE

(S.I.C. CODES 1422, 1423 AND 1429)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Crushed and Broken Stone Industry were valued at \$617 million, an increase of 33 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 9 percent from 1954 to 1958 to a total of 41 thousand employees in 1958. Value added in mining in the industry amounted to \$446 million in 1958, an increase of 32 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

The above figures exclude data for quarries operated as parts of cement, lime, and other manufacturing establishments. Selected information was obtained on such quarries and is shown in tables 1A, 1B, 1D, 2, and 3. It is

estimated that the value of stone quarried and used in the same establishment or shipped by such establishments was about \$136 million in 1958, an increase of 14 percent from 1954. Also excluded are quarries operated by Federal, State, and local governments; these are not included in the scope of the Census.

The Crushed and Broken Stone, including Riprap, Industry represents establishments engaged primarily in mining or quarrying crushed and broken stone. Quarries operated in conjunction with cement and lime plants are included in this industry when separate reports are available; but the stone crushing operations performed at the plant are not included. Nepheline syenite operations are classified in Industry 1459, Clay, Ceramic, and Refractory Minerals, N.E.C. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

Separate statistics are shown in tables 1B, 1C, 1D, and 2 for the subindustries: Crushed and Broken Limestone, Crushed and Broken Granite, and Crushed and Broken Miscellaneous Stone. The figures for limestone include such other related rocks as dolomite, cement rock, marl, travertine, and calcareous tufa. Those for granite include such related rocks as gneiss, syenite, and diorite. The miscellaneous stone figures include data for slate, marble, trap rock, sandstone, and other stones. For 1958, the value of



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueiler, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

shipments of the Crushed and Broken Limestone Subindustry was \$461 million, an increase of 40 percent from 1954; the value of shipments of the Crushed and Broken Granite Subindustry was \$49 million, an increase of 57 percent from 1954; and the value of shipments of the Crushed and Broken Miscellaneous Stone Subindustry was \$108 million, an increase of 2 percent from 1954.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of about 36,300 establishments covered in the 1958 Census, approximately three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Crushed and Broken Stone Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Crushed and Broken Stone Industry in 1958 amounted to \$617 million. Of this total, \$568 million were products primary to the industry, and \$49 million were products primary to other industries, receipts for contract services, and products purchased and resold without further processing.

The total value of shipments for an industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that the value of net shipments of crushed and broken stone by all producers was \$602 million. Of this total, \$566 million or 93 percent represented shipments by establishments classified in the Crushed and Broken Stone Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

In addition to shipments of crushed and broken stone, large tonnages were quarried and used in the same establishment in making cement, lime, paying mixtures, and nonclay refractories. Stone so used in 1958 amounted to 79 million tons, an increase of 13 percent from

1954. This 1958 tonnage amounted to approximately 17 percent of the total tonnage of stone produced by quarries at the mining and manufacturing establishments covered in this report.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports are being issued for other industries. A summary of preliminary United States totals for each mining industry has recently been issued and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1A.—GENERAL STATISTICS FOR ALL CRUSHED AND BROKEN STONE QUARRIES IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

(Excludes quarries operated by Federal, State, and local governments)

Item	Unit of measure	1958			1954			1939	1929
		Total	Quarries classified in the Crushed and Broken Stone Industry	Quarries operated as parts of cement and lime establishments ¹	Total	Quarries classified in the Crushed and Broken Stone Industry	Quarries operated as parts of cement and lime establishments ¹		
Establishments:									
Total.....	Number.....	2,193	1,974	219	2,156	1,901	255	² 1,533	1,437
With 20 or more employees.....	....do.....	740	643	97	(NA)	529	(NA)	(NA)	(NA)
All employees:									
Number.....	Number.....	(NA)	40,629	(NA)	(NA)	37,404	(NA)	33,707	(NA)
Payroll.....	Thousand dollars	(NA)	181,955	(NA)	(NA)	145,196	(NA)	37,655	(NA)
Production and development workers:									
Number.....	Number.....	(NA)	35,004	(NA)	(NA)	33,124	(NA)	30,937	34,184
Man-hours.....	Thousands.....	86,018	76,056	9,962	88,136	75,559	12,577	62,366	(NA)
Wages.....	Thousand dollars	170,648	147,507	23,141	145,915	122,499	23,416	31,491	41,839
Value added in mining.....	....do.....	(NA)	445,704	(NA)	(NA)	337,611	(NA)	75,892	(NA)
Cost of supplies, stone received for preparation, purchased fuel and electric energy, and contract work.....	....do.....	210,113	188,027	22,086	149,697	127,885	21,812	³ 25,697	⁴ 33,771
Stone received for preparation only.....	....do.....	(NA)	2,063	(NA)	(NA)	2,438	(NA)	(NA)	(NA)
Contract work only.....	....do.....	(NA)	12,213	(NA)	(NA)	10,685	(NA)	787	(NA)
Cost of purchased machinery installed.....	....do.....	(NA)	50,859	(NA)	(NA)	44,701	(NA)	(NA)	(NA)
Value of shipments and receipts and products produced and used in making cement and lime...	....do.....	⁵ 753,126	617,119	⁵ 136,007	⁵ 584,101	465,254	⁵ 118,847	101,589	130,659
Quantity of stone net shipments and stone produced and used in making cement, lime, and other manufactured products at same establishment.....	Thousand short tons.....	469,251	379,092	90,159	363,407	282,252	81,155	129,964	160,605
Capital expenditures.....	Thousand dollars	(NA)	67,471	(NA)	(NA)	44,943	(NA)	(NA)	(NA)

NA Not available. ¹Includes data for a few quarries operated as parts of other manufacturing establishments, such as nonclay refractories and paving mixtures and blocks establishments. ²Represents number of quarries. ³Excludes the cost of stone received for preparation. ⁴Excludes the cost of contract work and stone received for preparation. ⁵For comparability with earlier years, includes the estimated value of stone produced and used in the same manufacturing establishments in making cement or lime and other manufactured products: for 1958, \$115.8 million; for 1954, \$100 million.

Table 1B.—GENERAL STATISTICS FOR CRUSHED AND BROKEN LIMESTONE QUARRIES IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

(Excludes quarries operated by Federal, State, and local governments)

Item	Unit of measure	1958			1954			1939	1929
		Total	Quarries classified in the Crushed and Broken Limestone Subindustry	Quarries operated as parts of cement and lime establishments ¹	Total	Quarries classified in the Crushed and Broken Limestone Subindustry	Quarries operated as parts of cement and lime establishments ¹		
Establishments:									
Total.....	Number.....	1,664	1,466	198	1,690	1,447	243	² 1,192	980
With 20 or more employees.....	....do.....	579	482	97	(NA)	388	(NA)	(NA)	(NA)
All employees:									
Number.....	Number.....	(NA)	30,699	(NA)	(NA)	28,240	(NA)	26,513	(NA)
Payroll.....	Thousand dollars	(NA)	137,118	(NA)	(NA)	107,818	(NA)	29,356	(NA)
Production and development workers:									
Number.....	Number.....	(NA)	26,489	(NA)	(NA)	24,925	(NA)	24,482	26,476
Man-hours.....	Thousands.....	67,234	57,434	9,800	68,664	56,335	12,329	48,901	(NA)
Wages.....	Thousand dollars	134,539	111,674	22,865	113,587	90,715	22,872	24,903	32,067
Value added in mining.....	....do.....	(NA)	335,880	(NA)	(NA)	239,604	(NA)	57,959	(NA)
Cost of supplies, stone received for preparation, purchased fuel and electric energy, and contract work.....	....do.....	162,146	140,195	21,951	109,794	88,504	21,290	³ 19,188	⁴ 26,110
Stone received for preparation only.....	....do.....	(NA)	1,962	(NA)	(NA)	1,895	(NA)	(NA)	(NA)
Contract work only.....	....do.....	(NA)	15,829	(NA)	(NA)	7,336	(NA)	675	(NA)
Cost of purchased machinery installed.....	....do.....	(NA)	38,489	(NA)	(NA)	32,622	(NA)	(NA)	(NA)
Value of shipments and receipts and products produced and used in making cement and lime...	....do.....	⁵ 595,260	460,564	⁵ 134,696	⁵ 445,305	328,757	⁵ 116,548	77,147	97,940
Quantity of stone net shipments and stone used in making cement and lime.....	Thousand short tons.....	381,281	291,848	89,433	299,924	220,233	79,691	108,228	133,278
Capital expenditures.....	Thousand dollars	(NA)	54,000	(NA)	(NA)	31,973	(NA)	(NA)	(NA)

NA Not available. ¹Includes data for a few quarries operated as parts of other manufacturing establishments, such as ready-mixed concrete establishments. ²Represents number of quarries. ³Excludes the cost of stone received for preparation. ⁴Excludes the cost of contract work and stone received for preparation. ⁵For comparability with earlier years, includes the estimated value of stone produced and used in the same establishments in making cement or lime: for 1958, \$115 million; for 1954, \$100 million.

1958 CENSUS OF MINERAL INDUSTRIES

Table 1C.—SUMMARY STATISTICS FOR THE CRUSHED AND BROKEN GRANITE SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929
(Excludes quarries operated by Federal, State, and local governments)

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	115	101	179	86
With 20 or more employees.....	..do.....	60	40	(NA)	(NA)
All employees:					
Number.....	Number.....	3,260	2,550	2,332	(NA)
Payroll.....	Thousand dollars	12,708	8,879	2,355	(NA)
Production and development workers:					
Number.....	Number.....	2,867	2,344	2,100	2,066
Man-hours.....	Thousands.....	6,409	5,607	4,574	(NA)
Wages.....	Thousand dollars	10,500	7,573	1,782	2,162
Value added in mining.....	..do.....	32,378	22,201	5,042	(NA)
Cost of supplies, stone received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	14,798	8,820	2,988	3,841
Contract work only.....	..do.....	556	729	26	(NA)
Cost of purchased machinery installed.....	..do.....	5,846	3,041	(NA)	(NA)
Value of shipments and receipts.....	..do.....	48,552	30,875	7,030	6,751
Quantity of stone net shipments.....	Thousand s.tons.	33,249	21,693	6,423	5,951
Capital expenditures.....	Thousand dollars.	4,470	3,187	(NA)	(NA)

NA Not available. ¹Represents number of quarries only.²Excludes cost of stone received for preparation.³Excludes cost of contract work and stone received for preparation.Table 1D.—SUMMARY STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS STONE QUARRIES IN THE UNITED STATES: 1958, 1954, 1939, AND 1929
(Excludes quarries operated by Federal, State, and local governments)

Item	Unit of measure	1958			1954			1939	1929
		Total	Quarries classified in the Crushed and Broken Miscellaneous Stone Subindustry	Quarries operated as parts of cement and other manufacturing plants ¹	Total	Quarries classified in the Crushed and Broken Miscellaneous Stone Subindustry	Quarries operated as parts of manufacturing plants ¹		
Establishments:									
Total.....	Number.....	414	393	21	365	353	12	2,262	371
With 20 or more employees.....	..do.....	101	101	...	(NA)	101	(NA)	(NA)	(NA)
All employees:									
Number.....	Number.....	(NA)	6,670	(NA)	(NA)	6,614	(NA)	4,862	(NA)
Payroll.....	Thousand dollars	(NA)	32,129	(NA)	(NA)	28,499	(NA)	5,944	(NA)
Production and development workers:									
Number.....	Number.....	(NA)	5,648	(NA)	(NA)	5,855	(NA)	4,355	5,642
Man-hours.....	Thousands.....	12,375	12,213	162	13,865	13,617	248	8,891	(NA)
Wages.....	Thousand dollars	25,609	25,333	276	24,755	24,211	544	4,806	7,610
Value added in mining.....	..do.....	(NA)	77,446	(NA)	(NA)	75,806	(NA)	12,891	(NA)
Cost of supplies, stone received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	33,169	33,034	135	31,083	30,561	522	34,521	45,820
Stone received for preparation only.....	..do.....	(NA)	101	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Contract work only.....	..do.....	(NA)	3,060	(NA)	(NA)	2,620	(NA)	86	(NA)
Cost of purchased machinery installed.....	..do.....	(NA)	6,524	(NA)	(NA)	9,038	(NA)	(NA)	(NA)
Value of shipments and receipts and stone produced and used in the same establishment in making manufactured products.....	..do.....	2109,314	108,003	51,311	107,921	105,622	2,299	17,412	25,968
Quantity of net stone shipments and stone produced and used in making manufactured products.....	Thousand s.tons.	54,721	53,995	726	41,790	40,326	1,464	15,313	21,376
Capital expenditures.....	Thousand dollars	(NA)	9,001	(NA)	(NA)	9,783	(NA)	(NA)	(NA)

NA Not available.

¹For 1958 includes data for 1 granite quarry and for 1954, data for 3 granite quarries.²Represents number of quarries.³Excludes the cost of stone received for preparation.⁴Excludes the cost of contract work and stone received for preparation.⁵For comparability with earlier years, includes the estimated value of stone produced and used in the same manufacturing establishment in making cement or other manufactured products. This estimated value was \$800 thousand.

Table 2.--GENERAL STATISTICS FOR CRUSHED AND BROKEN STONE QUARRIES, BY DIVISIONS AND STATES: 1958 AND 1954
(Excludes quarries operated by Federal, State, and local governments)

Subindustry, region or division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, stone re- ceived for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts ¹	Capital expen- di- tures	All em- ploy- ees, number ²	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
CRUSHED AND BROKEN STONE INDUSTRY														
United States, total.....	1,974	643	40,629	181,955	35,004	76,056	147,507	445,704	188,027	50,859	617,119	67,471	37,404	337,611
New England.....	53	19	1,074	5,480	912	2,070	4,332	11,162	5,336	803	16,255	1,046	(NA)	(NA)
Maine.....	6	1	104	399	86	215	338	716	410	35	1,126	35	(NA)	(NA)
Massachusetts.....	19	8	400	2,076	350	772	1,749	4,496	1,512	331	5,967	372	332	2,717
Connecticut.....	17	7	369	2,160	312	731	1,597	3,970	2,230	363	6,134	429	334	3,338
Middle Atlantic....	255	108	7,301	37,268	6,026	13,070	28,573	89,000	37,970	8,496	122,746	12,720	(NA)	(NA)
New York.....	63	30	2,069	11,808	1,670	3,772	9,373	30,173	9,807	2,804	37,929	4,855	(NA)	(NA)
New Jersey.....	25	15	948	5,461	811	1,802	4,237	14,739	4,974	725	19,506	932	1,164	16,917
Pennsylvania.....	167	63	4,284	19,999	3,545	7,496	14,963	44,088	23,189	4,967	65,311	6,933	4,585	34,449
East North Central.	476	119	9,755	47,530	8,419	17,922	38,860	114,353	41,624	9,582	150,781	14,778	(NA)	(NA)
Ohio.....	113	39	3,339	15,468	2,864	6,070	12,600	30,596	12,157	3,233	42,318	3,668	(NA)	(NA)
Indiana.....	67	26	1,166	5,185	988	2,113	4,010	12,690	5,065	2,448	16,880	3,323	(NA)	(NA)
Illinois.....	153	30	2,624	13,240	2,340	5,280	11,400	42,234	13,026	2,449	52,295	5,414	(NA)	(NA)
Michigan.....	43	8	1,541	8,561	1,280	2,336	6,517	18,239	5,870	511	23,519	1,101	(NA)	(NA)
Wisconsin.....	100	16	1,085	5,076	947	2,123	4,333	10,594	5,506	941	15,769	1,272	1,295	16,189
West North Central.	376	99	5,380	23,422	4,584	10,050	19,335	57,393	25,554	8,396	80,120	11,223	(NA)	(NA)
Minnesota.....	28	10	556	2,500	464	1,026	2,029	4,240	2,537	521	6,762	536	377	2,430
Iowa.....	115	31	1,653	7,128	1,423	3,300	6,006	20,424	10,458	3,151	29,550	4,483	(NA)	(NA)
Missouri.....	145	33	1,962	8,201	1,655	3,363	6,554	18,774	7,127	3,057	25,310	3,648	1,790	12,710
South Dakota.....	9	4	147	650	116	228	516	2,074	454	138	2,416	250	203	1,491
Nebraska.....	20	5	280	1,333	243	606	1,170	3,326	1,352	423	4,088	1,013	(NA)	(NA)
Kansas.....	59	16	782	3,610	683	1,527	3,060	8,555	3,626	1,106	11,994	1,293	797	6,518
South Atlantic.....	283	150	8,120	30,800	7,166	15,662	24,878	85,388	39,488	11,329	122,264	13,941	(NA)	(NA)
Delaware and Maryland.....	23	13	842	3,849	698	1,523	2,672	9,421	5,006	751	14,099	1,079	512	5,758
Virginia.....	70	41	1,806	5,960	1,631	3,346	4,874	15,394	6,599	2,844	20,743	4,094	1,479	8,907
West Virginia.....	32	10	694	2,837	592	1,142	2,260	7,063	2,334	270	9,188	479	(NA)	(NA)
North Carolina.....	41	23	1,118	4,044	1,040	2,366	3,419	10,632	6,054	1,075	16,342	1,419	982	9,246
South Carolina.....	10	9	510	1,643	466	989	1,455	4,176	2,589	473	6,722	516	(NA)	(NA)
Georgia.....	31	25	1,418	5,142	1,236	2,895	4,193	17,805	7,659	4,100	26,392	3,172	1,063	9,530
Florida.....	76	29	1,732	7,325	1,503	3,401	6,005	20,897	9,247	1,816	28,778	3,182	(NA)	(NA)
East South Central.	216	78	4,110	14,324	3,628	7,843	11,941	38,552	16,757	5,560	54,246	6,623	(NA)	(NA)
Kentucky.....	98	39	1,843	6,298	1,607	3,645	5,232	15,893	7,057	2,591	22,659	2,882	1,474	10,821
Tennessee.....	86	27	1,424	4,911	1,253	2,725	4,097	14,351	7,242	2,113	21,170	2,536	1,308	8,884
Alabama and Mississippi.....	32	12	843	3,115	768	1,473	2,612	8,308	2,458	856	10,417	1,205	(NA)	(NA)
West South Central.	84	38	2,311	9,171	2,060	5,035	8,063	19,640	10,158	3,004	29,953	2,849	(NA)	(NA)
Arkansas and Louisiana.....	17	4	401	1,517	364	919	1,376	3,265	1,263	735	5,041	222	(NA)	(NA)
Oklahoma.....	29	12	726	2,957	658	1,510	2,721	5,235	3,443	1,056	8,818	916	(NA)	(NA)
Texas.....	38	22	1,184	4,697	1,038	2,606	3,966	11,140	5,452	1,213	16,094	1,711	773	6,062
Mountain.....	68	8	850	4,637	736	1,459	3,789	9,882	3,976	2,181	13,767	2,272	(NA)	(NA)
Idaho.....	11	1	85	510	77	125	363	704	432	103	1,134	105	(NA)	(NA)
Colorado.....	12	3	216	1,098	192	383	948	2,002	874	134	2,845	165	(NA)	(NA)
Pacific.....	163	24	1,728	9,323	1,473	2,945	7,736	20,334	7,164	1,508	26,987	2,019	(NA)	(NA)
Washington.....	40	4	384	1,868	321	513	1,503	3,528	1,304	587	4,659	760	(NA)	(NA)
Oregon.....	41	4	297	1,382	249	479	1,201	2,821	1,242	282	4,048	297	232	2,083
California.....	82	16	1,047	6,073	903	1,953	5,032	13,985	4,618	639	18,280	962	3,240	14,854
CRUSHED AND BROKEN LIMESTONE SUBINDUSTRY														
United States, total.....	1,466	482	30,699	137,118	26,489	57,434	111,674	335,880	140,195	38,489	460,564	54,000	28,240	239,604
New England.....	12	3	211	813	181	420	674	1,273	762	67	1,890	212	130	735
Middle Atlantic....	179	76	5,351	26,749	4,441	9,464	20,844	62,070	27,804	6,830	86,635	10,069	5,303	46,241
New York.....	51	26	1,698	9,225	1,432	3,230	7,842	23,887	8,474	2,539	31,245	3,655	1,745	19,164
New Jersey.....	5	1	142	759	123	339	626	2,012	978	158	2,918	230		
Pennsylvania.....	123	49	3,511	16,765	2,886	5,895	12,376	36,171	18,352	4,133	52,472	6,184	3,558	27,077
East North Central.	430	111	8,782	43,617	7,582	16,344	35,669	106,534	38,603	8,476	139,945	13,668	8,730	83,926
Ohio.....	103	37	2,785	13,248	2,383	5,195	10,776	26,582	11,186	2,449	37,258	2,959	2,911	26,056
Indiana.....	61	24	1,026	4,709	875	1,912	3,636	11,932	4,777	2,251	15,857	3,103	1,082	8,495
Illinois.....	146	30	2,578	13,068	2,298	5,186	11,243	41,803	12,855	2,386	51,700	5,344	2,380	27,396
Michigan.....	40	8	1,535	8,542	1,274	2,322	6,498	18,207	5,716	511	23,341	1,093	1,493	16,030
Wisconsin.....	80	12	858	4,050	752	1,729	3,516	8,010	4,069	879	11,789	1,169	864	5,949

See footnotes at end of table.

1958 CENSUS OF MINERAL INDUSTRIES

Table 2.--GENERAL STATISTICS FOR CRUSHED AND BROKEN STONE QUARRIES, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Subindustry, region or division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, stone re- ceived for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts ¹	Capital expendi- tures	All em- ploy- ees, number ²	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
CRUSHED AND BROKEN LIMESTONE SUBINDUSTRY--Ccm.														
West North Central..	345	91	5,061	22,200	4,313	9,525	18,324	54,474	23,496	8,129	75,333	10,766	4,573	35,191
Minnesota.....	24	9	519	2,328	431	945	1,883	3,939	2,010	517	5,949	517	(NA)	(NA)
Iowa.....	110	30	1,604	6,914	1,380	3,207	5,826	20,017	9,927	3,143	28,688	4,399	1,266	11,266
Missouri.....	133	31	1,856	7,969	1,565	3,238	6,342	18,144	6,776	2,937	24,358	3,499	1,779	12,565
Kansas.....	55	15	730	3,394	639	1,424	2,874	8,152	3,285	1,058	11,254	1,241	761	6,197
South Atlantic.....	172	83	4,611	18,150	4,081	8,598	14,689	49,635	21,817	5,149	68,707	7,894	3,852	31,103
Virginia.....	46	26	1,235	4,120	1,119	2,279	3,316	9,814	4,430	1,817	13,532	2,529	1,036	6,056
West Virginia.....	23	10	644	2,694	547	1,074	2,138	6,797	2,241	269	8,839	468	910	6,538
North Carolina.....	9	5	205	677	224	397	637	2,208	1,059	390	3,106	551	214	2,044
Georgia.....	7	5	187	634	171	399	593	2,461	1,673	300	4,093	341	(NA)	(NA)
Florida.....	70	26	1,623	6,767	1,409	3,141	5,559	19,916	8,538	1,701	27,071	3,084	1,019	10,469
East South Central..	194	74	3,930	13,773	3,458	7,503	11,426	37,175	16,311	5,358	52,633	6,211	3,433	23,639
Kentucky.....	92	39	1,823	6,227	1,588	3,609	5,166	15,639	7,009	2,575	22,400	2,823	(NA)	(NA)
Tennessee.....	75	24	1,342	4,659	1,177	2,574	3,864	13,803	7,065	2,030	2,057	2,441	1,243	8,657
Alabama and Mississippi.....	27	11	765	2,887	693	1,320	2,396	7,733	2,237	753	9,776	947	(NA)	(NA)
West South Central..	58	32	1,835	7,337	1,636	4,020	6,419	15,568	8,282	2,137	23,503	2,484	1,415	10,507
Arkansas.....	10	3	159	465	137	304	399	1,280	517	125	1,779	143	101	574
Oklahoma.....	24	12	703	2,888	639	1,480	2,665	4,797	3,339	1,055	8,275	916	621	4,505
Texas.....	24	17	973	3,984	860	2,236	3,355	9,491	4,426	957	13,449	1,425	693	5,428
Mountain.....	35	6	462	2,246	402	759	1,818	4,580	1,649	2,012	6,151	2,090	368	3,207
Pacific.....	41	6	456	2,233	395	801	1,811	4,571	1,471	331	5,767	606	436	5,055
California.....	20	3	270	1,336	232	550	1,020	2,688	903	130	3,456	265	343	4,109
CRUSHED AND BROKEN GRANITE SUBINDUSTRY														
United States, total.....	115	60	3,260	12,708	2,867	6,409	10,500	32,378	14,798	5,846	48,552	4,470	2,550	22,201
Northeast.....	10	5	188	948	160	322	747	2,582	726	99	3,266	141	182	2,121
East North Central..	7	1	90	261	73	101	201	480	210	175	676	189	45	283
West North Central..	5	2	59	271	51	122	223	380	696	37	1,051	62		
South.....	69	48	2,612	9,325	2,318	5,312	7,732	24,543	11,679	5,185	37,702	3,705	1,991	16,262
Virginia.....	14	9	369	1,185	327	682	1,003	3,283	1,467	674	4,702	722	195	1,452
North Carolina.....	24	16	771	2,870	686	1,682	2,341	6,776	4,425	625	11,073	753	703	6,432
Georgia.....	18	14	778	2,759	663	1,474	2,146	8,890	2,828	2,836	12,880	1,674	507	4,201
Mountain.....	5	...	35	148	30	63	125	192	212	13	404	13	59	619
Pacific.....	19	4	276	1,755	235	489	1,472	4,201	1,275	337	5,453	360	273	2,916
California.....	13	3	213	1,451	179	383	1,196	3,463	888	134	4,273	212	253	2,823
CRUSHED AND BROKEN MISCELLA- NEOUS STONE SUBINDUSTRY														
United States, total.....	393	101	6,670	32,129	5,648	12,213	25,333	77,446	33,034	6,524	108,003	9,001	6,614	75,806
Northeast.....	107	43	2,625	14,238	2,156	4,934	10,640	34,237	14,014	2,303	47,210	3,344	(NA)	(NA)
Massachusetts.....	14	5	272	1,517	238	568	1,255	3,299	1,092	258	4,375	274	(NA)	(NA)
Connecticut.....	13	6	310	1,824	261	625	1,378	3,522	1,838	306	5,302	364	294	3,151
Pennsylvania.....	44	14	773	3,234	659	1,601	2,587	7,917	4,837	834	12,839	749	1,027	7,372
East North Central..	39	7	883	3,652	764	1,477	2,990	7,339	2,811	931	10,160	921	(NA)	(NA)
Ohio.....	10	2	554	2,220	481	875	1,824	4,014	971	784	5,060	709	(NA)	(NA)
West North Central..	26	6	260	951	220	403	788	2,539	1,362	230	3,736	395	(NA)	(NA)

See footnotes at end of table.

Table 2.--GENERAL STATISTICS FOR CRUSHED AND BROKEN STONE QUARRIES, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Subindustry, region or division, and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of supplies, stone re- ceived for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts ¹	Capital expen- ditures	All em- ploy- ees, number ²	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
CRUSHED AND BROKEN MISCELLANEOUS STONE SUBINDUSTRY--CON.														
South.....	90	29	1,553	5,710	1,361	3,107	4,616	16,659	8,314	2,064	23,918	3,119	(NA)	(NA)
Virginia.....	10	6	202	655	185	385	555	2,297	702	353	2,509	843	248	1,399
North Carolina....	7	2	137	473	125	277	417	1,404	326	60	1,675	115	65	770
Georgia.....	6	6	453	1,749	402	1,022	1,454	6,454	3,158	964	9,419	1,157	(NA)	(NA)
Florida.....	7	3	113	555	99	270	470	1,225	953	115	2,195	98	(NA)	(NA)
Mountain.....	28	2	353	2,243	304	637	1,846	5,110	2,115	156	7,212	169	(NA)	(NA)
Pacific, total.....	103	14	996	5,335	843	1,655	4,453	11,562	4,418	840	15,767	1,053	(NA)	(NA)
Washington.....	22	3	227	1,153	185	297	872	1,862	775	307	2,625	319	(NA)	(NA)
Oregon.....	32	1	205	896	166	326	765	1,866	816	158	2,591	249	(NA)	(NA)
California.....	49	10	564	3,286	492	1,032	2,816	7,834	2,827	375	10,551	485	364	37,922
QUARRIES OPERATED AS PARTS OF CEMENT, LIME, AND OTHER MANUFAC- TURING ESTABLISHMENTS														
United States, total.....	219	97	(NA)	(NA)	(NA)	9,962	23,141	(NA)	22,086	(NA)	20,207	(NA)	12,577	(NA)
New England.....	7	1	(NA)	(NA)	(NA)	232	532	(NA)	438	(NA)	1,469	(NA)	(NA)	(NA)
Massachusetts.....	4	...	(NA)	(NA)	(NA)	99	213	(NA)	191	(NA)	1,156	(NA)	195	(NA)
Middle Atlantic....	47	23	(NA)	(NA)	(NA)	2,464	5,622	(NA)	4,266	(NA)	5,805	(NA)	(NA)	(NA)
New York.....	13	6	(NA)	(NA)	(NA)	486	1,132	(NA)	960	(NA)	735	(NA)	(NA)	(NA)
Pennsylvania.....	34	17	(NA)	(NA)	(NA)	1,978	4,490	(NA)	3,306	(NA)	5,070	(NA)	2,714	(NA)
East North Central..	36	18	(NA)	(NA)	(NA)	1,856	4,536	(NA)	4,177	(NA)	5,070	(NA)	(NA)	(NA)
Ohio.....	21	12	(NA)	(NA)	(NA)	1,129	2,733	(NA)	2,576	(NA)	4,813	(NA)	6,278	(NA)
Illinois.....	5	2	(NA)	(NA)	(NA)	254	682	(NA)	483	(NA)	(D)	(NA)	356	(NA)
Wisconsin.....	5	...	(NA)	(NA)	(NA)	35	61	(NA)	134	(NA)	92	(NA)	41	(NA)
West North Central..	24	14	(NA)	(NA)	(NA)	1,247	2,955	(NA)	3,212	(NA)	2,252	(NA)	(NA)	(NA)
Missouri.....	10	9	(NA)	(NA)	(NA)	768	1,769	(NA)	2,209	(NA)	2,197	(NA)	982	(NA)
Kansas.....	8	2	(NA)	(NA)	(NA)	211	473	(NA)	370	(NA)	(D)	(NA)	425	(NA)
South Atlantic.....	25	9	(NA)	(NA)	(NA)	824	1,897	(NA)	1,872	(NA)	926	(NA)	(NA)	(NA)
Maryland.....	5	...	(NA)	(NA)	(NA)	106	262	(NA)	348	(NA)	(D)	(NA)	166	(NA)
Virginia.....	9	5	(NA)	(NA)	(NA)	385	811	(NA)	670	(NA)	(D)	(NA)	568	(NA)
East South Central..	19	10	(NA)	(NA)	(NA)	888	1,789	(NA)	1,785	(NA)	1,666	(NA)	(NA)	(NA)
Tennessee.....	6	4	(NA)	(NA)	(NA)	348	734	(NA)	476	(NA)	(NA)	(NA)	466	(NA)
Alabama and Mississippi.....	13	6	(NA)	(NA)	(NA)	540	1,055	(NA)	1,309	(NA)	1,666	(NA)	(NA)	(NA)
West South Central..	18	9	(NA)	(NA)	(NA)	779	1,581	(NA)	1,257	(NA)	1,022	(NA)	(NA)	(NA)
Texas.....	13	5	(NA)	(NA)	(NA)	551	1,127	(NA)	952	(NA)	(D)	(NA)	718	(NA)
Mountain.....	21	3	(NA)	(NA)	(NA)	376	907	(NA)	886	(NA)	364	(NA)	(NA)	(NA)
Pacific.....	22	10	(NA)	(NA)	(NA)	1,296	3,322	(NA)	4,193	(NA)	1,633	(NA)	(NA)	(NA)
California.....	15	9	(NA)	(NA)	(NA)	1,065	2,712	(NA)	3,847	(NA)	1,408	(NA)	(NA)	(NA)

D Withheld to avoid approximately disclosing figures for individual companies.

NA Not available.

¹For quarries at cement, lime, and other manufacturing establishments represents only crushed and broken stone shipped. Excludes the value of stone produced and used in the same establishment in the manufacture of cement, lime, and other manufactured products.²For quarries at cement, lime, and other manufacturing establishments represents thousands of man-hours worked by production and development workers.³Excludes data for one marble quarry.

Table 3.—PRIMARY PRODUCTS OF CRUSHED AND BROKEN STONE QUARRIES PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

(Excludes figures for quarries operated by Federal, State, and local governments)

Product, division, and State	1958					1954				
	Total produced and used or shipped	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹		Total produced and used or shipped	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹	
		Hydraulic cement	Quicklime and hydrated lime	Quantity	Value		Hydraulic cement	Quicklime and hydrated lime	Quantity ²	Value ²
	(1,000 short tons)			(1,000 short tons)	(\$1,000)	(1,000 short tons)			(1,000 short tons)	(\$1,000)
UNITED STATES										
All crushed and broken stone, total.....	³ 479,407	65,871	12,986	400,055	602,307	369,104	59,150	10,839	299,115	459,609
Limestone.....	³ 388,463	65,674	12,986	309,594	456,212	302,563	58,988	10,839	232,736	328,434
Granite.....	33,703	...	...	33,703	49,851	22,780	...	...	22,780	31,766
Miscellaneous stone (slate, marble, trap rock, sandstone, and other stone).....	³ 57,241	197	...	56,758	96,244	43,761	162	...	43,599	99,409
NEW ENGLAND										
All crushed and broken stone, total.....	³ 10,441	(D)	(D)	9,114	18,811	(D)	(D)	345	7,149	16,442
Limestone.....	1,976	(D)	(D)	(D)	2,521	(D)	(D)	345	382	1,169
Granite.....	1,315	...	...	1,315	2,341	923	...	...	923	1,523
Miscellaneous stone.....	³ 7,150	...	...	(D)	13,949	5,844	...	...	5,844	13,750
Maine										
All crushed and broken stone.....	1,052	(D)	(D)	(D)	1,137	(D)	(D)	(D)	517	1,137
New Hampshire and Rhode Island										
All crushed and broken stone.....	³ 196	...	...	³ 196	483	146	...	...	146	(NA)
Vermont										
All crushed and broken stone.....	416	...	(D)	(D)	3,367	(D)	...	(D)	486	4,544
Massachusetts										
All crushed and broken stone, total.....	³ 4,393	...	404	³ 3,989	7,388	3,481	...	246	3,235	5,464
Limestone.....	790	...	404	386	1,018	457	...	246	211	771
Granite.....	837	...	...	837	1,595	666	...	...	666	1,089
Miscellaneous stone.....	³ 2,766	...	...	³ 2,766	4,775	2,358	...	...	2,358	3,604
Connecticut										
All crushed and broken stone, total.....	4,384	...	(D)	(D)	6,436	(D)	...	(D)	2,765	4,915
Limestone and granite.....	570	...	(D)	(D)	1,006	(D)	...	(D)	86	(NA)
Miscellaneous stone.....	3,814	...	...	3,814	5,430	(NA)	...	...	(NA)	(NA)
MIDDLE ATLANTIC										
All crushed and broken stone, total.....	³ 74,934	(D)	(D)	³ 60,397	119,285	(D)	13,291	(D)	53,096	103,667
Limestone.....	³ 62,332	(D)	(D)	47,831	88,479	(NA)	13,291	(D)	(NA)	(NA)
Granite.....	484	...	...	484	1,216	(NA)	...	...	(NA)	(NA)
Miscellaneous stone.....	³ 12,118	³ 36	...	³ 12,082	29,590	(NA)	...	...	(NA)	(NA)
New York										
All crushed and broken stone, total.....	³ 22,764	(D)	(D)	³ 18,662	38,422	(D)	2,723	(D)	17,761	28,214
Limestone.....	³ 21,681	(D)	(D)	17,579	35,615	(D)	2,723	(D)	14,944	23,332
Granite and miscellaneous stone.....	³ 1,083	...	...	³ 1,083	2,807	2,817	...	...	2,817	4,882
New Jersey										
All crushed and broken stone.....	7,411	...	...	7,411	18,372	7,115	...	...	7,115	21,414
Pennsylvania										
All crushed and broken stone, total.....	³ 44,759	8,619	1,677	34,324	62,491	40,636	10,568	1,848	28,220	54,039
Limestone.....	³ 40,064	³ 8,722	1,677	29,665	49,956	36,669	10,568	1,848	24,253	43,141
Miscellaneous stone.....	³ 4,695	³ 36	...	4,659	12,535	3,967	...	...	3,967	10,898
EAST NORTH CENTRAL										
Crushed and broken stone, total.....	121,630	10,973	3,838	106,819	145,777	94,306	8,273	3,445	82,588	130,375
Limestone.....	⁴ 116,985	⁴ 10,973	3,838	102,174	136,182	93,019	8,273	3,445	81,301	114,148
Granite and miscellaneous stone.....	⁴ 4,645	(⁴)	...	4,645	9,595	1,287	...	...	1,287	16,227
Ohio										
Crushed and broken stone.....	35,550	3,886	3,688	27,976	43,091	32,172	3,126	3,325	25,721	37,938
Limestone.....	⁴ 34,772	⁴ 3,856	3,688	27,228	39,635	31,797	3,126	3,325	25,346	35,877
Indiana										
Crushed and broken stone.....	13,679	1,662	...	12,017	16,160	10,752	1,721	...	9,031	12,189
Limestone.....	13,049	1,662	...	11,387	15,054	10,731	1,721	...	9,010	12,127

See footnotes at end of table.

Table 3.—PRIMARY PRODUCTS OF CRUSHED AND BROKEN STONE QUARRIES PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	1958					1954				
	Total produced and used or shipped	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹		Total produced and used or shipped	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹	
		Hydraulic cement	Quicklime and hydrated lime	Quantity	Value		Hydraulic cement	Quicklime and hydrated lime	Quantity ²	Value ²
	(1,000 short tons)			(1,000 short tons)	(\$1,000)	(1,000 short tons)			(1,000 short tons)	(\$1,000)
EAST NORTH CENTRAL—Continued										
Illinois										
Crushed and broken stone.....	34,713	(D)	(D)	32,017	47,994	(D)	2,522	(D)	22,582	36,137
Limestone.....	34,391	(D)	(D)	31,695	47,520	(D)	2,522	(D)	22,546	35,810
Michigan										
Crushed and broken stone.....	25,342	(D)	...	(D)	22,817	17,754	904	...	16,850	21,554
Limestone.....	25,201	(D)	...	(D)	22,639	17,749	904	...	16,845	21,506
Wisconsin										
Crushed and broken stone, total.....	12,346	...	(D)	(D)	15,715	(D)	...	(D)	8,404	22,557
Limestone.....	9,542	...	(D)	(D)	11,334	(D)	...	(D)	7,554	8,828
Granite and miscellaneous stone.....	2,804	...	...	2,804	4,381	850	...	...	850	13,729
WEST NORTH CENTRAL										
Crushed and broken stone, total.....	66,203	8,837	2,535	54,831	78,753	(D)	(D)	(D)	38,171	55,485
Limestone.....	462,675	48,837	2,535	51,303	73,883	(D)	(D)	(D)	34,717	50,448
Granite and miscellaneous stone.....	43,528	(4)	...	3,528	4,870	3,454	...	...	3,454	5,037
Minnesota										
Crushed and broken stone.....	4,026	...	...	4,026	6,405	2,787	...	...	2,787	3,878
Limestone.....	3,476	...	...	3,476	5,374	(NA)	...	...	(NA)	(NA)
Iowa										
Crushed and broken stone.....	21,519	2,123	...	19,395	27,171	14,848	2,720	...	12,128	17,263
Missouri										
Crushed and broken stone.....	23,939	(D)	(D)	18,365	26,891	17,193	2,755	2,062	12,376	18,076
Limestone.....	23,135	(D)	(D)	17,365	26,109	16,796	2,755	2,062	11,979	17,863
North Dakota and South Dakota										
Crushed and broken stone.....	1,629	...	(D)	(D)	2,429	(D)	...	(D)	1,351	2,726
Limestone.....	809	...	(D)	(D)	1,031	(D)	...	(D)	615	1,010
Nebraska										
Crushed and broken stone.....	3,523	(D)	...	(D)	3,851	(D)	(D)	...	1,845	3,400
Limestone.....	3,518	(D)	...	(D)	3,840	(D)	(D)	...	(NA)	(NA)
Kansas										
Crushed and broken stone.....	11,567	2,534	...	9,033	12,006	10,159	2,475	...	7,684	10,142
Limestone.....	410,965	42,534	...	8,431	11,186	9,229	2,475	...	6,754	9,492
SOUTH ATLANTIC										
Crushed and broken stone, total.....	379,228	5,977	910	372,341	115,920	54,358	4,934	1,275	48,149	81,337
Limestone.....	49,023	5,919	910	42,194	65,953	(D)	(D)	1,275	(NA)	(NA)
Granite.....	323,335	...	...	323,335	35,451	(D)	...	...	(D)	(D)
Miscellaneous stone.....	6,870	58	...	6,812	14,516	(D)	(D)	...	(NA)	(NA)
Delaware and Maryland										
Crushed and broken stone.....	7,320	(D)	(D)	6,057	11,779	54,113	(D)	(D)	54,101	58,434
Limestone.....	6,352	(D)	(D)	5,100	9,960	54,041	(D)	(D)	53,129	56,224
Virginia										
Crushed and broken stone, total.....	314,309	(D)	(D)	11,894	19,981	(D)	(D)	725	8,240	13,743
Limestone.....	10,467	(D)	(D)	(D)	13,768	(D)	(D)	725	(NA)	(NA)
Granite.....	32,866	...	...	(D)	4,550	1,521	...	...	1,521	2,130
Miscellaneous stone.....	976	...	...	976	1,663	(NA)	(NA)	...	(NA)	(NA)
West Virginia										
Crushed and broken stone.....	5,022	(D)	...	(D)	8,624	(D)	(D)	(D)	7,971	12,959
Limestone.....	4,956	(D)	...	(D)	8,517	(D)	(D)	(D)	5,813	9,278
North Carolina										
Crushed and broken stone, total.....	11,406	...	...	11,406	16,377	8,930	...	...	8,930	12,963
Limestone.....	2,168	...	...	2,168	3,105	2,040	...	...	2,040	2,630
Granite.....	7,938	...	...	7,938	11,633	6,426	...	...	6,426	9,170
Miscellaneous stone.....	1,300	...	...	1,300	1,639	464	...	...	464	1,163

See footnotes at end of table.

Table 3.—PRIMARY PRODUCTS OF CRUSHED AND BROKEN STONE QUARRIES PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	1958					1954				
	Total produced and used or shipped (1,000 short tons)	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹		Total produced and used or shipped (1,000 short tons)	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹	
		Hydraulic cement	Quicklime and hydrated lime	Quantity (1,000 short tons)	Value (\$1,000)		Hydraulic cement	Quicklime and hydrated lime	Quantity ² (1,000 short tons)	Value ² (\$1,000)
SOUTH ATLANTIC—Continued										
South Carolina										
Crushed and broken stone.....	4,869	(D)	...	(D)	6,722	(D)	(D)	...	5,274	5,426
Granite.....	4,084	...	...	4,084	6,283	2,227	...	...	2,227	3,168
Georgia										
Crushed and broken stone.....	12,326	(D)	...	(D)	24,373	5,444	(D)	(D)	4,919	13,618
Limestone.....	1,719	(D)	...	(D)	3,852	1,088	(D)	(D)	563	2,376
Granite.....	8,425	...	...	8,425	12,941	3,220	...	...	3,220	6,049
Florida										
Crushed and broken stone.....	23,976	(D)	...	(D)	28,064	(D)	(D)	...	11,239	15,194
EAST SOUTH CENTRAL										
Crushed and broken stone, total.....	45,160	4,404	1,168	39,588	53,405	(D)	5,116	(D)	24,482	34,719
Limestone.....	44,787	4,404	1,168	39,215	51,970	(D)	5,116	(D)	(D)	(NA)
Granite and miscellaneous stone.....	373	(4)	...	373	1,435	(D)	...	...	(D)	(NA)
Kentucky										
Crushed and broken stone.....	15,629	...	...	15,629	20,437	10,603	...	...	10,603	14,417
Limestone.....	15,523	...	...	15,523	20,253	(NA)	...	...	(NA)	(NA)
Tennessee										
Crushed and broken stone.....	17,789	(D)	(D)	15,920	21,033	(D)	2,111	(D)	9,769	13,099
Limestone.....	17,686	(D)	(D)	15,817	20,412	(D)	2,111	(D)	9,603	12,744
Alabama and Mississippi										
Crushed and broken stone.....	11,742	(D)	(D)	8,039	11,935	7,548	3,005	433	4,110	7,203
Limestone.....	411,578	(D)	(D)	7,875	11,305	(NA)	3,005	433	(NA)	(NA)
WEST SOUTH CENTRAL										
Crushed and broken stone, total.....	31,872	6,754	1,121	23,997	29,343	(D)	(D)	(D)	16,717	25,604
Limestone.....	426,940	46,754	1,121	19,065	23,116	(D)	(D)	(D)	(NA)	(NA)
Granite and miscellaneous stone.....	4,932	(4)	...	4,932	6,227	(NA)	...	...	(NA)	(NA)
Arkansas and Louisiana										
Crushed and broken stone.....	5,186	(D)	(D)	(D)	5,303	(D)	(D)	(D)	6,310	6,913
Oklahoma										
Crushed and broken stone.....	9,040	(D)	...	(D)	8,552	6,230	6,706	...	6,524	6,501
Limestone.....	8,007	(D)	...	(D)	8,035	(NA)	6,706	...	(NA)	(NA)
Texas										
Crushed and broken stone, total.....	17,646	(D)	(D)	11,653	15,488	12,385	4,814	486	7,085	9,964
Limestone.....	16,402	(D)	(D)	10,409	13,047	11,701	4,814	486	6,401	8,880
Granite and miscellaneous stone.....	1,244	...	...	1,244	2,441	684	...	...	684	1,084
MOUNTAIN										
Crushed and broken stone, total.....	318,993	33,779	531	14,683	13,697	9,487	2,474	274	6,739	8,195
Limestone.....	7,166	3,727	531	2,908	6,011	(NA)	(NA)	274	(NA)	(NA)
Granite.....	102	...	...	102	247	1,107	...	...	1,107	808
Miscellaneous stone.....	311,725	352	...	11,673	7,439	(NA)	(NA)	...	(NA)	(NA)
Montana										
Crushed and broken stone.....	889	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1,705	1,399
Idaho										
Crushed and broken stone.....	997	(D)	...	(D)	1,062	(D)	(D)	...	790	1,227
Wyoming										
Crushed and broken stone.....	554	(D)	...	(D)	824	(D)	(D)	...	927	1,213
Colorado										
Crushed and broken stone.....	2,774	(D)	...	(D)	2,389	(D)	(D)	...	431	1,231
Limestone.....	2,729	(D)	...	(D)	2,284	(D)	(D)	...	(NA)	(NA)

See footnotes at end of table.

Table 3.— PRIMARY PRODUCTS OF CRUSHED AND BROKEN STONE QUARRIES PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, division, and State	1958					1954					
	Total produced and used or shipped (1,000 short tons)	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹		Total produced and used or shipped (1,000 short tons)	Produced and used in the same estab- lishment in the manufacture of (1,000 short tons)		Net shipments in- cluding interplant transfers ¹		
		Hydraulic cement	Quicklime and hydrated lime	Quantity (1,000 short tons)	Value ((\$1,000))		Hydraulic cement	Quicklime and hydrated lime	Quantity ² (1,000 short tons)	Value ² ((\$1,000))	
MOUNTAIN—Continued											
New Mexico											
Crushed and broken stone.....	637	...	(D)	(D)	771	(NA)	}	(D)	(D)	702	638
Arizona											
Crushed and broken stone.....	1,206	(D)	(D)	318	805	(NA)		(D)	(D)	51	82
Limestone.....	1,070	(D)	(D)	182	595	604					
Utah											
Crushed and broken stone.....	11,076	(D)	(D)	(D)	(D)	1,191		(D)	(D)	769	1,003
Nevada											
Crushed and broken stone.....	860	...	(D)	(D)	751	(D)		...	(D)	1,415	1,484
PACIFIC											
Crushed and broken stone, total.....	30,946	12,070	461	18,415	27,313	(D)		(D)	(D)	16,327	28,277
Limestone.....	16,657	12,070	461	4,126	8,094	(NA)		(D)	(D)	(NA)	(NA)
Granite.....	4,375	...	...	4,375	5,974	(NA)		...	...	(NA)	(NA)
Miscellaneous stone.....	9,914	...	...	9,914	13,245	(NA)		...	...	(NA)	(NA)
Washington											
Crushed and broken stone, total.....	3,796	(D)	...	(D)	4,342	(D)		1,037	(D)	2,762	4,217
Limestone.....	1,565	(D)	...	(D)	1,570	(D)		1,037	(D)	371	1,022
Granite and miscellaneous stone.....	2,231	...	...	2,231	2,772	2,331		...	...	2,391	3,195
Oregon											
Crushed and broken stone, total.....	3,655	(D)	...	(D)	4,899	(D)		(D)	...	2,482	3,204
Limestone.....	1,496	(D)	...	(D)	1,757	(NA)		(D)	...	(NA)	(NA)
Granite and miscellaneous stone.....	2,159	...	...	2,159	3,142	(NA)		...	...	(NA)	(NA)
California											
Crushed and broken stone, total.....	23,495	11,020	461	12,014	18,072	18,745		7,323	339	11,083	20,856
Limestone.....	13,596	11,020	461	2,115	4,767	11,169		7,323	339	3,507	6,417
Granite.....	3,821	...	...	3,821	5,261	(NA)		...	...	(NA)	(NA)
Miscellaneous stone.....	6,078	...	...	6,078	8,044	(NA)		...	...	(NA)	(NA)

D Withheld to avoid approximately disclosing data for individual companies.

NA Not available.

¹Represents gross shipments including interplant transfers less broken stone received from other establishments for crushing, screening, or washing. For 1958, stone reported received for crushing, screening, or washing in the United States as a whole was: for all stone, 2,610 thousand tons, costing \$2,188 thousand; for limestone, 1,993 thousand tons, costing \$1,704 thousand; and for miscellaneous stone, 617 thousand tons, costing \$484 thousand.

²Except for United States totals, represents shipments by crushed and broken stone quarries only including quarries operated as parts of manufacturing plants and for the specified types of stone represents only quantity for quarries primarily engaged in producing such stone. For the United States such quantity totals are: all stone, 293,418 tons; limestone, 229,935; and granite, 21,958. Except for United States totals, value represents the gross shipments of primary products and the value of secondary products and services. For the United States as a whole the value of secondary products and services was: for the Crushed and Broken Limestone Subindustry, \$17,790 thousand; for the Crushed and Broken Granite Subindustry, \$859 thousand; and for the Crushed and Broken Miscellaneous Stone Subindustry, \$10,741 thousand.

³Includes some stone mined and used in the same establishment in making asphalt and tar paving mixtures and nonclay refractories. For the United States as a whole such uses amounted to 286 thousand tons, and in the United States total, the figures for such granite are included with those for such miscellaneous stone.

⁴Figures for Limestone include, and figures for Granite and miscellaneous stone exclude, less than 40 thousand tons of stone other than limestone used in making cement.

⁵Figures for Delaware are included with those for South Carolina.

⁶Figures for Louisiana are included with those for Oklahoma.



1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

May 1960

MIC(P)-14D

SAND AND GRAVEL INDUSTRY

(S.I.C. Code 1441)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Sand and Gravel Industry were valued at \$561 million, an increase of 20 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of one percent from 1954 to 1958 to a total of 36.8 thousand employees in 1958. Value added in mining in the industry amounted to \$433 million in 1958, an increase of 21 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in

the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

The above figures exclude data for sand and gravel mining operations as parts of concrete brick and block, ready mixed concrete, and other manufacturing establishments. Selected information was obtained on such mining operations and is shown in tables 1A, 2, and 3. It is estimated that the value of sand and gravel used in the same establishment or shipped by such establishments was about \$71 million in 1958. Also excluded are sand and gravel mining operations by Federal, State, and local governments; these are not included in the scope of the census.

Table 1A.—COMPARATIVE STATISTICS FOR SAND AND GRAVEL MINING OPERATIONS IN THE UNITED STATES: 1958, 1954, 1939, AND 1929
(Excludes sand and gravel mining operations by Federal, State, and local governments)

Item	Unit of measure	1958			1954			1939	1929
		Total	Sand and gravel industry	Sand and gravel mining included in manufacturing establishments ¹	Total	Sand and gravel industry	Sand and gravel mining included in manufacturing establishments ¹		
Establishments:									
Total.....	Number.....	4,050	3,671	379	(NA)	3,931	(NA)	1,569	1,072
With 20 or more employees.....	.....do.....	507	480	27	(NA)	45	(NA)	(NA)	209
All employees:									
Number.....	Number.....	(NA)	36,813	(NA)	(NA)	36,466	(NA)	19,777	22,028
Payroll.....	Thousand dollars.....	(NA)	171,918	(NA)	(NA)	147,313	(NA)	25,215	37,015
Production and development workers:									
Number.....	Number.....	(NA)	30,715	(NA)	(NA)	30,533	(NA)	16,959	18,061
Man-hours.....	Thousands.....	70,506	65,424	5,082	77,727	70,103	7,624	35,785	(NA)
Wages.....	Thousand dollars.....	145,522	134,508	11,014	133,666	118,966	14,700	18,822	25,385
Value added in mining.....	.....do.....	(NA)	432,923	(NA)	(NA)	356,729	(NA)	161,935	89,235
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	.....do.....	150,650	143,367	7,283	(NA)	107,679	(NA)	17,468	23,212
Contract work only.....	.....do.....	(NA)	17,486	(NA)	(NA)	14,692	(NA)	538	461
Cost of purchased machinery installed.....	.....do.....	(NA)	37,784	(NA)	(NA)	47,694	(NA)	(NA)	7,963
Value of shipments and receipts.....	.....do.....	607,806	561,214	46,592	478,305	466,015	12,290	79,403	112,447
Quantity of sand and gravel produced.....	Thousand s.tons.....	554,252	488,142	66,110	421,537	400,690	20,847	122,547	175,297
Capital expenditures.....	Thousand dollars.....	(NA)	52,860	(NA)	(NA)	46,087	(NA)	(NA)	(NA)

NA Not available. ¹Represents sand and gravel mining operations as parts of establishments primarily engaged in producing concrete brick and block, ready mixed concrete, and asphalt and tar paving mixtures. ²Represents number of operations with 21 or more production or development workers.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Sand and Gravel Industry represents establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, and otherwise preparing sand and gravel for construction and other special uses such as glassmaking, molding, and abrasives. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

Separate statistics are shown in tables 1B, 1C, 1D, and 2 for the subindustries: Common Sand and Gravel, Glass Sand, and Molding Sand. For 1958, the value of shipments of the Common Sand and Gravel Subindustry was \$516 million, an increase of 19 percent from 1954; the value of shipments of the Glass Sand Subindustry was \$28 million, an increase of 53 percent; and the value of shipments of the Molding Sand Subindustry was \$16 million, an increase of 39 percent.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of about 36,300 establishments covered in the 1958 Census, approximately three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Sand and Gravel Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Sand and Gravel Industry in 1958 amounted to \$561 million. Of this total, \$520 million were products primary to the industry and \$41 million were products primary to other industries, receipts for contract services, and value of products purchased and resold without further processing.

The total value of shipments for an industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that the value of shipments of sand and gravel by all producers of such products was \$576 million. Of this total, \$520 million or 90 percent, represented shipments by establishments classified in the Sand and Gravel Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

In addition to shipments of sand and gravel, large tonnages were mined and used in the same establishments in making concrete brick and block, ready mixed concrete, and asphalt and tar paving mixtures. Sand and gravel so used in 1958 amounted to about 25 million tons, or over 4 percent of the total tonnage of sand and gravel produced by all mining operations covered in the 1958 censuses of mineral industries and manufactures.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports are being issued for other industries. A summary of preliminary United States totals for each mining industry has recently been issued and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the summer and autumn of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1B.—COMPARATIVE STATISTICS FOR THE COMMON SAND AND GRAVEL SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929
(Excludes sand and gravel mining operations by Federal, States, and local governments)

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	3,501	3,756	1,383	957
With 20 or more employees.....	..do.....	447	426	(NA)	(NA)
All employees:					
Number.....	Number.....	33,976	34,090	17,029	19,666
Payroll.....	Thousand dollars..	158,972	138,558	21,929	33,526
Production and development workers:					
Number.....	Number.....	28,399	28,423	14,584	15,994
Man-hours.....	Thousands.....	60,645	65,600	31,324	(NA)
Wages.....	Thousand dollars..	124,863	111,600	16,482	22,780
Value added in mining.....	..do.....	400,546	334,046	53,870	81,159
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	130,521	99,955	15,260	21,153
Contract work only.....	..do.....	16,801	13,919	399	325
Cost of purchased machinery installed.....	..do.....	34,541	45,825	(NA)	7,174
Value of shipments and receipts.....	..do.....	516,469	435,662	69,130	102,312
Capital expenditures.....	..do.....	49,139	44,164	(NA)	(NA)

NA Not available.

Table 1C.—COMPARATIVE STATISTICS FOR THE GLASS SAND SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	46	44	40	25
With 20 or more employees.....	..do.....	18	20	(NA)	(NA)
All employees:					
Number.....	Number.....	1,630	1,295	1,522	1,125
Payroll.....	Thousand dollars..	7,502	5,098	2,056	1,592
Production and development workers:					
Number.....	Number.....	1,341	1,144	1,280	1,030
Man-hours.....	Thousands.....	2,843	2,505	2,667	(NA)
Wages.....	Thousand dollars..	5,737	4,279	1,456	1,314
Value added in mining.....	..do.....	20,325	13,701	4,625	4,082
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	8,420	5,021	1,512	1,277
Contract work only.....	..do.....	134	166	77	15
Cost of purchased machinery installed.....	..do.....	2,318	965	(NA)	433
Value of shipments and receipts.....	..do.....	28,371	18,591	6,137	5,359
Capital expenditures.....	..do.....	2,692	1,096	(NA)	(NA)

NA Not available.

Table 1D.—COMPARATIVE STATISTICS FOR THE MOLDING SAND SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	124	131	146	90
With 20 or more employees.....	..do.....	15	8	(NA)	(NA)
All employees:					
Number.....	Number.....	1,207	1,081	1,226	1,237
Payroll.....	Thousand dollars..	5,444	3,657	1,230	1,897
Production and development workers:					
Number.....	Number.....	975	966	1,095	1,037
Man-hours.....	Thousands.....	1,936	1,998	1,794	(NA)
Wages.....	Thousand dollars..	3,908	3,087	884	1,291
Value added in mining.....	..do.....	12,052	8,982	3,440	3,994
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	4,426	2,703	696	782
Contract work only.....	..do.....	551	607	62	121
Cost of purchased machinery installed.....	..do.....	925	904	(NA)	356
Value of shipments and receipts.....	..do.....	16,374	11,762	4,136	4,776
Capital expenditures.....	..do.....	1,029	827	(NA)	(NA)

NA Not available.

Table 2.—GENERAL STATISTICS FOR SAND AND GRAVEL MINING OPERATIONS, BY DIVISIONS AND STATES: 1958 AND 1954

(Excludes sand and gravel mining operations by Federal, State, and local governments)

Industry, subindustry, division and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
SAND AND GRAVEL INDUSTRY														
United States, total.....	3,671	480	36,813	171,918	30,715	65,424	134,508	432,923	143,367	37,784	561,214	52,860	36,466	356,729
Common sand and gravel subindustry	3,501	447	33,976	158,972	28,399	60,645	124,863	400,546	130,521	34,541	516,469	49,139	34,090	334,046
Glass sand subindustry	46	18	1,630	7,502	1,341	2,843	5,737	20,325	8,420	2,318	28,371	2,692	1,295	13,701
Molding sand subindustry	124	15	1,207	5,444	975	1,936	3,908	12,052	4,426	925	16,374	1,029	1,081	8,982
New England, total..	214	13	1,381	6,428	1,120	2,257	4,770	14,534	5,028	1,389	18,909	2,042	1,437	12,318
Common sand and gravel sub- industry.....	207	12	1,344	6,278	1,086	2,180	4,637	14,147	4,915	1,376	18,411	2,027	(NA)	(NA)
Glass sand and Molding sand subindustries..	7	1	37	150	34	77	133	387	113	13	498	15	(NA)	(NA)
Maine.....	29	...	105	327	98	186	309	903	299	91	1,107	186	79	462
New Hampshire.....	16	1	80	469	65	151	344	864	370	55	1,233	56	99	846
Vermont.....	21	1	89	304	72	140	230	596	322	57	894	81	100	644
Massachusetts.....	87	4	589	2,761	457	941	2,105	6,090	2,170	632	8,039	853	732	5,761
Rhode Island.....	12	2	102	435	100	168	350	1,106	245	152	1,313	190	87	795
Connecticut.....	49	5	416	2,132	328	671	1,432	4,975	1,622	402	6,323	676	340	3,810
Middle Atlantic, total.....	375	45	4,175	21,658	3,276	6,984	16,195	49,858	15,795	5,173	66,145	4,681	4,389	53,224
Common sand and gravel sub- industry.....	334	35	3,285	17,506	2,560	5,560	13,214	41,310	12,019	4,273	53,603	3,999	3,689	46,727
Glass sand sub- industry.....	6	3	356	1,664	292	589	1,314	3,571	1,973	424	5,851	117	700	6,497
Molding sand subindustry....	35	7	534	2,488	424	835	1,667	4,977	1,803	476	6,691	565		
New York, total...	195	14	1,743	10,081	1,278	2,728	7,203	25,192	5,642	1,646	30,390	2,090	1,777	23,542
Common sand and gravel sub- industry.....	179	14	1,636	9,490	1,229	2,616	7,038	24,560	5,468	1,630	29,617	2,041	1,707	23,026
Molding sand subindustry....	16	...	107	591	49	112	165	632	174	16	773	49	70	516
New Jersey, total.	91	17	1,138	5,638	935	2,105	4,456	12,889	4,785	1,150	17,319	1,505	1,009	10,829
Common sand and gravel sub- industry.....	77	9	721	3,567	568	1,318	2,779	7,778	2,169	772	9,638	1,081	650	6,976
Glass sand and Molding sand subindustries..	14	8	417	2,071	367	787	1,677	5,111	2,616	378	7,681	424	359	3,853
Pennsylvania, total.....	89	14	1,294	5,939	1,063	2,151	4,536	11,777	5,368	2,377	18,436	1,086	1,603	18,853
Common sand and gravel sub- industry.....	78	12	928	4,449	763	1,626	3,397	8,972	4,382	1,871	14,348	877	1,332	16,725
Glass sand and Molding sand subindustries..	11	2	366	1,490	300	525	1,139	2,805	986	506	4,088	209	271	2,128
East North Central, total.....	1,042	111	9,679	46,966	7,918	16,763	36,557	118,501	36,152	10,144	150,614	14,183	8,245	83,604
Common sand and gravel sub- industry.....	989	103	8,866	42,852	7,267	15,408	33,568	107,341	32,069	9,343	135,902	12,851	7,741	78,798
Glass sand sub- industry.....	6	3	368	2,032	298	645	1,472	6,018	2,531	429	7,973	1,005	504	4,806
Molding sand subindustry....	47	5	445	2,082	353	710	1,517	5,142	1,552	372	6,739	327		
Ohio, total.....	290	28	2,604	12,431	2,053	4,451	9,534	31,628	7,152	2,982	37,972	3,790	2,267	23,844
Common sand and gravel sub- industry.....	271	24	2,337	11,302	1,823	3,996	8,557	28,843	5,959	2,854	34,078	3,578	2,061	22,753
Glass sand and Molding sand subindustries..	19	4	267	1,129	230	455	977	2,785	1,193	128	3,894	212	206	1,091

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR SAND AND GRAVEL MINING OPERATIONS, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Industry, subindustry, division and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
								(\$1,000)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	($1,000)
East North Central— Continued														
Indiana.....	177	12	1,299	6,140	1,023	2,292	4,427	12,596	4,562	1,372	16,941	1,589	1,265	10,952
Illinois, total..	172	35	2,373	12,347	2,014	4,155	9,693	33,032	11,783	2,006	42,934	3,887	1,907	20,412
Common sand and gravel sub- industry.....	162	34	2,072	10,755	1,781	3,672	8,620	28,311	9,927	1,712	36,865	3,085	1,829	19,975
Glass sand and Molding sand subindustries..	10	1	301	1,592	233	483	1,073	4,721	1,856	294	6,069	802	78	437
Michigan, total..	240	20	2,102	10,152	1,741	3,628	8,123	27,751	7,124	2,476	34,531	2,820	1,735	19,260
Common sand and gravel sub- industry.....	232	19	1,975	9,376	1,652	3,421	7,681	25,441	6,674	2,251	31,774	2,592	1,615	17,086
Glass sand and Molding sand subindustries..	8	1	127	776	89	207	442	2,310	450	225	2,757	228	120	2,174
Wisconsin, total..	163	16	1,301	5,896	1,087	2,237	4,780	13,494	5,531	1,308	18,236	2,097	1,071	9,136
Common sand and gravel sub- industry.....	154	14	1,217	5,433	1,014	2,077	4,388	12,542	5,041	1,176	16,731	2,028	998	8,391
Glass sand and Molding sand subindustries..	9	2	84	463	73	160	392	952	490	132	1,505	69	73	745
West North Central, total.....	631	55	4,444	20,064	4,043	7,798	15,658	44,428	16,356	3,997	58,014	6,767	4,487	37,372
Common sand and gravel sub- industry.....	622	53	4,352	19,683	3,963	7,630	15,343	43,696	16,024	3,771	56,855	6,636	(NA)	(NA)
Glass sand and Molding sand subindustries..	9	2	92	381	80	168	315	732	332	226	1,159	131	(NA)	(NA)
Minnesota.....	151	17	1,289	6,770	1,306	2,090	4,794	14,229	5,773	609	18,756	1,855	1,044	8,784
Iowa.....	112	7	727	3,170	611	1,330	2,622	8,362	2,371	850	10,274	1,309	674	6,539
Missouri.....	82	14	781	3,047	710	1,336	2,443	6,242	2,287	694	8,536	687	778	6,629
North Dakota and South Dakota.....	72	5	442	2,051	393	888	1,665	4,378	1,667	703	5,449	1,299	641	5,088
Nebraska.....	120	7	696	2,736	609	1,217	2,270	5,927	2,705	396	8,246	782	682	4,803
Kansas.....	94	5	509	2,290	414	937	1,864	5,290	1,553	745	6,753	835	668	5,529
South Atlantic, total.....	304	56	4,113	16,310	3,539	7,594	12,991	43,572	15,395	4,731	57,938	5,760	4,144	36,201
Common sand and gravel sub- industry.....	292	51	3,574	14,167	3,097	6,674	11,418	37,967	13,686	3,904	50,594	4,963	(NA)	(NA)
Glass sand and Molding sand subindustries..	12	5	539	2,143	442	920	1,573	5,605	1,709	827	7,344	797	(NA)	(NA)
Delaware.....	10	...	60	228	51	88	175	597	163	1	686	75	50	566
Maryland and D. C.	45	12	807	3,489	686	1,451	2,654	8,781	4,236	1,736	12,618	2,135	927	8,799
Virginia.....	44	10	783	3,072	689	1,579	2,463	8,418	2,297	629	10,683	661	961	9,341
West Virginia.....	25	7	610	2,786	480	991	2,112	8,311	1,673	718	10,275	427	757	7,107
North Carolina.....	42	8	422	1,338	368	779	1,094	3,596	1,121	321	4,510	528	480	3,606
South Carolina.....	32	3	301	1,111	244	510	944	3,438	1,189	607	4,395	839	323	2,182
Georgia.....	41	7	460	1,602	443	866	1,475	3,783	1,591	191	5,224	341	322	2,179
Florida.....	65	9	670	2,684	578	1,330	2,074	6,648	3,125	528	9,547	754	324	2,421
East South Central, total.....	155	35	2,040	7,795	1,738	3,933	6,206	18,091	6,454	1,960	23,154	3,351	2,166	14,450
Common sand and gravel sub- industry.....	142	33	1,903	7,356	1,625	3,693	5,837	16,920	6,134	1,800	21,799	3,055	(NA)	(NA)
Glass sand and Molding sand subindustries..	13	2	137	439	113	240	369	1,171	320	160	1,355	296	(NA)	(NA)
Kentucky.....	33	7	382	1,865	317	828	1,394	3,922	998	463	4,491	892	412	3,312
Tennessee.....	44	9	611	2,405	529	1,075	1,951	5,328	1,976	746	7,043	1,007	762	4,731
Alabama.....	33	9	381	1,233	325	720	996	2,984	964	186	3,588	546	450	2,527
Mississippi.....	45	10	666	2,292	567	1,310	1,865	5,857	2,516	565	8,032	906	542	3,880

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR SAND AND GRAVEL MINING OPERATIONS, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Industry, subindustry, division and State	1958											1954		
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1000)
West South Central, total.....	353	75	4,405	17,099	3,845	9,077	14,207	42,647	16,786	4,475	57,624	6,284	4,362	31,460
Common sand and gravel sub- industry.....	343	72	4,263	16,590	3,721	8,821	13,784	41,353	15,688	4,301	55,229	6,113	(NA)	(NA)
Glass sand and Molding sand subindustries..	10	3	142	509	124	256	423	1,294	1,098	174	2,395	171	(NA)	(NA)
Arkansas.....	33	6	388	1,343	328	659	1,012	2,843	1,288	266	3,990	407	427	3,139
Louisiana.....	77	25	1,223	4,812	1,043	2,433	3,952	11,683	5,589	1,303	16,890	1,685	1,119	7,363
Oklahoma, total...	53	4	335	1,241	282	603	1,048	2,897	1,488	365	4,464	286	363	2,956
Common sand and gravel sub- industry.....	49	3	268	977	227	478	837	2,225	811	193	3,050	179	287	2,334
Glass sand and Molding sand subindustries..	4	1	67	264	55	125	211	672	677	172	1,414	107	76	622
Texas.....	190	40	2,459	9,703	2,192	5,382	8,195	25,224	8,421	2,541	32,280	3,906	2,453	18,002
Mountain, total.....	220	15	1,843	9,059	1,561	3,218	7,467	29,334	7,042	1,120	35,076	2,420	1,597	16,392
Common sand and gravel sub- industry.....	211	14	1,787	8,783	1,513	3,115	7,242	28,806	6,742	1,115	34,304	2,359	(NA)	(NA)
Glass sand and Molding sand subindustries..	9	1	56	276	48	103	225	528	300	5	772	61	(NA)	(NA)
Montana.....	32	2	196	973	168	331	797	3,442	812	106	3,656	704	215	1,337
Idaho.....	24	1	177	700	157	279	626	1,729	773	147	2,553	96	195	1,868
Wyoming.....	13	1	80	352	72	150	331	1,054	171	6	1,164	67	81	319
Colorado.....	54	3	450	2,375	352	753	1,760	5,651	1,805	240	7,344	352	482	5,028
New Mexico.....	26	4	305	1,209	270	550	1,065	3,729	967	318	4,260	754	161	3,092
Arizona.....	31	...	104	342	92	147	307	923	438	41	1,267	135	121	1,349
Utah.....	26	2	379	2,308	326	715	1,955	11,011	1,609	165	12,560	225	161	1,409
Nevada.....	14	2	152	800	124	293	626	1,795	467	97	2,272	87	181	1,990
Pacific, total.....	377	75	4,733	26,539	3,675	7,800	20,457	71,958	24,359	4,795	93,740	7,372	5,639	71,708
Common sand and gravel sub- industry.....	361	74	4,602	25,757	3,567	7,564	19,820	69,006	23,244	4,658	89,772	7,136	(NA)	(NA)
Glass sand and Molding sand subindustries..	16	1	131	782	108	236	637	2,952	1,115	137	3,968	236	(NA)	(NA)
Washington.....	60	9	426	2,143	350	657	1,785	5,902	2,042	587	7,655	876	914	8,601
Oregon.....	69	5	529	2,757	434	870	2,218	5,049	3,006	859	7,832	1,082	913	8,932
California, total.	248	61	3,778	21,639	2,891	6,273	16,454	61,007	19,311	3,349	78,253	5,414	3,812	54,175
Common sand and gravel sub- industry.....	237	60	3,655	20,905	2,790	6,056	15,861	58,233	18,230	3,214	74,456	5,221	3,693	51,890
Glass sand and Molding sand subindustries..	11	1	123	734	101	217	593	2,774	1,081	135	3,797	193	119	2,285
SAND AND GRAVEL MINING INCLUDED IN MANUFACTURING ESTABLISHMENTS														
United States, total.....	381	27				5,082	11,019		7,283		46,592			
New England.....	33	1				253	552		365		2,020			
Massachusetts.....	18	1				164	370		216		1,666			
Middle Atlantic.....	45	3				568	1,088		656		5,046			
Pennsylvania.....	19	2				299	518		409		1,503			
East North Central, total.....	73	4	(NA)	(NA)	(NA)	685	1,447	(NA)	706	(NA)	8,892	(NA)	(NA)	(NA)
Ohio.....	16	...				140	312		104		1,312			
Indiana.....	17	1				143	275		93		794			
Illinois.....	8	2				139	277		130		3,631			
Michigan.....	18	...				132	315		195		1,990			
Wisconsin.....	14	1				131	268		184		1,165			
West North Central.. Minnesota.....	50 16	3 1				420 152	759 262		511 196		2,610 1,307			

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR SAND AND GRAVEL MINING OPERATIONS, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Industry, subindustry, division and State	1958											1954				
	Establish- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work (\$1,000)	Cost of pur- chased machin- ery in- stalled (\$1,000)	Value of ship- ments (\$1,000)	Capital expendi- tures (\$1,000)	All em- ploy- ees, number	Value added in mining (\$1,000)		
	Total	With 20 or more em- ploy- ees	Number	Payroll (\$1,000)	Number	Man- hours (1,000)	Wages (\$1,000)									
SAND AND GRAVEL MINING INCLUDED IN MANUFACTURING ESTABLISHMENTS-- Continued																
South Atlantic.....	24	3	}	(NA)	(NA)	{	458	1,047	{	624	{	3,182	{	(NA)	(NA)	(NA)
Florida.....	5	2					275	585		329		1,830				
East South Central..	8	2					139	214		203		1,555				
West South Central..	18	4					737	1,328		759		4,972				
Texas.....	11	3					367	559		428		1,811				
Mountain.....	56	3	}	(NA)	(NA)	{	954	2,267	{	1,655	{	9,092	{	(NA)	(NA)	(NA)
Idaho.....	9	...					68	149		125		1,078				
Colorado.....	8	1					126	257		201		1,206				
New Mexico.....	5	...					100	227		233		1,727				
Arizona.....	11	2					563	1,401		919		3,918				
Pacific, total.....	74	4	}			{	868	2,317	{	1,804	{	9,223	{			
Washington.....	20	...					180	491		352		1,850				
Oregon.....	16	1					117	255		93		1,510				
California.....	38	3					571	1,571		1,359		5,863				

NA Not available.

Table 3.--PRIMARY PRODUCTS OF THE SAND AND GRAVEL INDUSTRY PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

(Excludes sand and gravel produced by Federal, State, and local government operations.)

Product, division, and State	1958			1954		
	Total production (1,000 short tons)	Total shipments including interplant transfers		Total production ¹ (1,000 short tons)	Total shipments including interplant ² transfers ³	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
UNITED STATES						
Sand and gravel, total.....	560,494	530,386	576,322	428,599	412,335	425,500
Common sand, total.....	237,591	223,392	223,267	174,738	167,393	160,678
Run of pit or bank.....	50,973	50,469	38,959	14,675	(NA)	³ 8,572
Washed, screened, ground, or otherwise prepared.....	186,618	172,923	184,308	160,063	(NA)	³ 159,498
Glass sand, total.....	7,374	7,351	21,793	5,955	5,974	16,720
Run of pit or bank.....	280	280	525	136	(NA)	³ 157
Washed, screened, ground, or otherwise prepared.....	7,094	7,071	21,268	5,819	(NA)	³ 16,539
Molding sand, total.....	7,866	7,819	19,569	7,534	7,531	15,410
Run of pit or bank.....	1,241	1,234	1,872	1,302	(NA)	³ 1,450
Washed, screened, ground, or otherwise prepared.....	6,625	6,585	17,697	6,232	(NA)	³ 13,959
Gravel, total.....	307,663	291,824	311,693	240,372	231,437	232,692
Run of pit or bank.....	72,478	72,885	51,901	30,149	(NA)	³ 17,344
Washed, screened, or otherwise prepared.....	235,185	218,939	259,792	210,223	(NA)	³ 227,556
NEW ENGLAND						
Sand and gravel, total.....	19,804	18,002	19,497	(NA)	13,398	13,055
Common sand, total.....	8,915	7,965	7,942	(NA)	(NA)	(NA)
Run of pit or bank.....	1,792	1,740	1,475			
Washed, screened, ground, or otherwise prepared.....	7,123	6,225	6,467			
Glass sand and molding sand.....	168	155	434			
Gravel, total.....	10,721	9,882	11,121	(NA)	(NA)	(NA)
Run of pit or bank.....	3,246	3,237	2,400			
Washed, screened, or otherwise prepared.....	7,475	6,645	8,721			
Sand and gravel, by State:						
Maine.....	1,483	1,352	1,194	800	798	575
New Hampshire.....	993	920	1,063	808	808	926
Vermont.....	810	752	820	611	611	767
Massachusetts.....	9,661	8,531	8,645	(NA)	6,738	6,117
Rhode Island.....	1,370	1,254	1,307	(NA)	798	766
Connecticut.....	5,487	5,193	6,468	3,702	3,645	3,904
MIDDLE ATLANTIC						
Sand and gravel, total.....	52,814	51,090	72,699	(NA)	49,476	62,188
Common sand, total.....	27,870	26,881	30,675	(NA)	(NA)	(NA)
Run of pit or bank.....	4,779	4,793	4,299			
Washed, screened, ground, or otherwise prepared.....	23,091	22,088	26,376			
Glass sand.....	1,577	1,577	4,732			
Molding sand.....	2,417	2,383	7,279	(NA)	(NA)	(NA)
Gravel, total.....	20,950	20,249	30,013			
Run of pit or bank.....	4,247	4,536	3,016			
Washed, screened, or otherwise prepared.....	16,703	15,713	26,997			
Sand and gravel, by State:				(NA)	(NA)	(NA)
New York.....	27,675	27,285	31,625			
New Jersey.....	12,242	11,734	18,310			
Pennsylvania.....	12,897	12,071	22,764			
EAST NORTH CENTRAL						
Sand and gravel, total.....	149,348	144,373	151,062	101,697	101,207	97,633
Common sand, total.....	63,023	61,049	59,397	(NA)	(NA)	(NA)
Run of pit or bank.....	17,063	16,503	11,511			
Washed, screened, ground, or otherwise prepared.....	45,960	44,546	47,886			
Glass sand.....	1,791	1,791	5,167			
Molding sand.....	3,670	3,679	8,151	(NA)	(NA)	(NA)
Gravel, total.....	80,864	77,854	78,347			
Run of pit or bank.....	13,915	14,237	11,778			
Washed, screened, or otherwise prepared.....	66,949	63,597	66,569			
Sand and gravel, by State:				(NA)	(NA)	(NA)
Ohio.....	33,964	32,464	39,296			
Indiana.....	19,501	18,065	16,302			
Illinois.....	37,321	36,615	41,786			
Michigan.....	38,296	37,424	35,635			
Wisconsin.....	20,266	19,805	18,043			

See footnotes at end of table.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

January 1960

MIC(P)-14E-1

BENTONITE AND FULLER'S EARTH

(S.I.C. CODES 1452 AND 1454)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Bentonite Industry were valued at \$16.9 million, a decrease of 23 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 8 percent from 1954 to 1958 to a total of 686 employees in 1958. Value added in mining in the industry amounted to \$12.3 million in 1958, a decrease of 25 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from

value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.--GENERAL STATISTICS FOR THE BENTONITE INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	41	43	129
With 20 or more employees.....	..do.....	15	16	(NA)
All employees:				
Number.....	..do.....	686	634	419
Payroll.....	Thousand dollars	2,884	2,135	446
Production and development workers:				
Number.....	Number.....	543	578	357
Man-hours.....	Thousands.....	1,145	1,340	687
Wages.....	Thousand dollars	1,993	1,920	309
Value added in mining.....	..do.....	12,268	16,350	1,463
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	4,699	5,518	519
Contract work only.....	..do.....	1,174	1,829	38
Cost of purchased machinery installed.....	..do.....	976	604	(NA)
Value of shipments.....	..do.....	16,884	21,830	1,982
Capital expenditures.....	..do.....	1,059	642	(NA)

NA Not available.

¹Represents number of mines.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.
Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00

During 1958, shipments of the Fuller's Earth Industry were valued at \$8.7 million, an increase of 45 percent over 1954. Average employment in this industry showed an increase of 16 percent from 1954 to 1958 to a total of 652 employees. Value added in this industry amounted to \$6.1 million, an increase of 45 percent over 1954.

The Bentonite Industry represents establishments engaged primarily in mining, milling, or otherwise preparing bentonite.

The Fuller's Earth Industry represents establishments engaged primarily in mining, milling, or otherwise preparing fuller's earth.

This report includes figures for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Bentonite and Fuller's Earth Industries consisted not only of products described above as primary to these industries, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Bentonite Industry amounted to \$16.9 million. Of this total, \$16.6 million were products primary to the industry, and \$0.3 million were products primary to other industries and receipts for contract services.

The total value of shipments for the Bentonite Industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter

figures, appearing in table 3, indicate that the value of crude and prepared bentonite shipped by all industries was \$23.7 million. This includes \$22.2 million for prepared bentonite, representing shipments of \$15.1 million by the Bentonite Industry and shipments of \$7.1 million by other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM

More detailed figures for this industry will appear later in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," and "secondary production," as well as the various statistical items such as "employment," "value added," etc. Similar preliminary and final reports will be issued for other industries during the coming months. A series of preliminary summary reports showing United States totals for each mining industry and for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U.S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 1B.--GENERAL STATISTICS FOR THE FULLER'S EARTH INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	14	16	122	22
With 20 or more employees.....	do.....	6	6	(NA)	(NA)
All employees:					
Number.....	do.....	652	564	678	1,096
Payroll.....	Thousand dollars	2,400	1,744	746	1,156
Production and development workers:					
Number.....	Number.....	527	510	562	991
Man-hours.....	Thousands.....	1,147	1,109	1,051	(NA)
Wages.....	Thousand dollars	1,674	1,381	438	853
Value added in mining.....	do.....	6,058	4,179	1,402	3,589
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	do.....	3,040	1,819	705	1,223
Contract work only.....	do.....	280	223	72	351
Cost of purchased machinery installed.....	do.....	174	539	(NA)	98
Value of shipments.....	do.....	8,692	6,012	2,107	4,812
Capital expenditures.....	do.....	580	525	(NA)	(NA)

NA Not available.

*Represents number of mines.

Table 2.--GENERAL STATISTICS FOR THE BENTONITE AND FULLER'S EARTH INDUSTRIES, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
BENTONITE INDUSTRY														
UNITED STATES, TOTAL.....	41	15	686	2,884	543	1,145	1,993	12,268	4,699	976	16,884	1,059	634	16,350
East and South.....	16	7	373	1,474	292	588	879	4,638	1,909	162	6,549	160	350	5,357
Mississippi.....	6	3	126	374	110	217	288	2,319	433	100 {	2,771	160	146	2,281
Texas.....	6	3	129	435	103	212	286	793	873		1,664	83 {	90	1,175
West.....	25	8	313	1,410	251	557	1,114	7,630	2,790	814	10,335	899	284	10,993
Wyoming.....	10	7	212	958	159	368	691	6,476	2,336	753	8,750	815	210	10,389
FULLER'S EARTH INDUSTRY														
UNITED STATES, TOTAL.....	14	6	652	2,400	527	1,147	1,674	6,058	3,040	174	8,692	580	564	4,179
South Atlantic.....	7	6	594	2,213	477	1,042	1,537	5,562	2,599	139	7,763	537	495	3,679
South Central and West.....	7	...	58	187	50	105	137	496	441	35	929	43	69	500

1958 CENSUS OF MINERAL INDUSTRIES

Table 3.--PRIMARY PRODUCTS OF THE BENTONITE AND FULLER'S EARTH INDUSTRIES PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
Bentonite:				
Crude bentonite:				
Mined and prepared at same establishment.....	1,303	xxx	1,209	{ xxx (D)
Received from other establishments for preparation.....	297	1,562		
Shipments including interplant transfers.....	402	1,515		
Prepared bentonite shipped including interplant transfers, total.....	1,369	22,168	1,477	21,157
Prepared in the bentonite industry.....	1,162	15,111	(D)	(D)
Prepared in other industries.....	207	7,057	(D)	(D)
Fuller's earth:				
Crude fuller's earth prepared ²	468	xxx	449	xxx
Net shipments of fuller's earth ¹	288	6,787	311	6,029

xxx Not applicable.

D Withheld to avoid approximately disclosing figures for individual establishments.

¹Represents gross shipments less receipts from other establishments of crude materials for preparation.²Represents crude fuller's earth mined and prepared at the same establishment and fuller's earth received from other establishments for preparation.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

April 1960

MIC(P)-14E-2

FIRE CLAY

(S.I.C. CODE 1453)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Fire Clay Industry were valued at \$18.6 million, a decrease of 16 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 26 percent from 1954 to 1958 to a total of 1.5 thousand employees in 1958. Value added in mining in the industry amounted to \$14.4 million in 1958, a decrease of 18 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—SUMMARY STATISTICS FOR FIRE CLAY MINES IN THE UNITED STATES: 1958, 1954 AND 1939

Item	Unit of measure	1958			1954			1939
		Total	Mines and plants classified in the fire clay industry	Mines included in establishments classified in manufacturing industries ¹	Total	Mines and plants classified in the fire clay industry	Mines included in establishments classified in manufacturing industries ¹	
Establishments:								
Total.....	Number.....	317	182	² 135	353	248	² 105	2306
With 20 or more employees.....	...do.....	28	19	²⁹	(NA)	29	(NA)	(NA)
All employees:								
Number.....	Number.....	(NA)	1,473	(NA)	(NA)	1,987	(NA)	3,910
Payroll.....	Thousand dollars	(NA)	6,015	(NA)	(NA)	6,598	(NA)	3,865
Production and development workers:								
Number.....	Number.....	(NA)	1,280	(NA)	(NA)	1,802	(NA)	3,655
Man-hours.....	Thousands.....	3,844	2,234	1,610	5,542	3,123	2,419	5,642
Wages.....	Thousand dollars	8,602	4,985	3,617	9,783	5,670	4,113	3,366
Value added in mining.....	...do.....	(NA)	14,400	(NA)	(NA)	17,468	(NA)	6,168
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work	...do.....	7,548	4,518	3,030	7,519	4,773	2,746	1,010
Contract work only.....	...do.....	(NA)	816	(NA)	(NA)	1,686	(NA)	143
Cost of purchased machinery installed.....	...do.....	(NA)	1,685	(NA)	(NA)	1,292	(NA)	(NA)
Value of shipments and receipts.....	...do.....	18,696	18,572	124	22,283	22,206	77	7,178
Quantity of fire clay shipped or used in making clay products.....	Thousand short tons.....	8,488	4,042	4,446	8,394	4,405	3,989	4,101
Capital expenditures.....	Thousand dollars	(NA)	2,031	(NA)	(NA)	1,327	(NA)	(NA)

NA Not available.

¹Represents fire clay mines operated as parts of establishments in the following manufacturing industries: Brick and structural clay tile; Ceramic tile and floor tile; Clay refractories; Structural clay products, n.e.c., and Pottery products, n.e.c.

²Represents number of mines.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

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The Fire Clay Industry represents establishments engaged primarily in mining, milling, or otherwise preparing fire clay, including stoneware clay and diaspore. Establishments producing fire clay in conjunction with the manufacture of clay products are classified in Major Group 32. Such mines produced about 51 percent of all crude fire clay in 1958. Separate figures are shown for both types of mines in tables 1 and 2. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Fire Clay Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Fire Clay Industry amounted to \$18.6 million. Of this total, \$0.8 million were products primary to other industries and receipts for contract services.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures appear in table 3. The total value of crude and prepared fire clay in 1958 was \$19.4 million, of which \$17.8 million represented shipments by the Fire Clay Industry. Production of crude fire clay was approximately 8.7 million tons in 1958, of which 4.0 million tons was produced at mines classified in the Fire Clay Industry; 4.4 million tons at mines included in establishments classified in the manufacturing industries (chiefly for use in the same establishment in making brick, tile,

clay refractories, and other structural clay products); and 0.2 million tons as secondary products of other mineral industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR FIRE CLAY MINES, BY DIVISIONS AND STATES: 1958 AND 1954

Division, State, and industry	1958											1954		
	Establish- ments, number ¹		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States, total.....	317	28	(NA)	(NA)	(NA)	3,844	8,602	(NA)	7,548	(NA)	18,696	(NA)	(NA)	(NA)
Fire clay industry.....	182	19	1,473	6,015	1,280	2,234	4,985	14,400	4,518	1,685	18,572	2,031	1,987	17,468
Mines included in manufac- turing estab- lishments.....	135	9	(NA)	(NA)	(NA)	1,610	3,617	(NA)	3,030	(NA)	124	(NA)	(NA)	(NA)
Middle Atlantic, total.....	72	8	(NA)	(NA)	(NA)	1,067	2,331	(NA)	1,766	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay industry.....	46	7	457	1,926	387	688	1,582	3,561	1,167	986	4,619	1,095	721	5,165
Mines included in manufac- turing estab- lishments.....	26	1	(NA)	(NA)	(NA)	379	749	(NA)	599	(NA)	(D)	(NA)	(NA)	(NA)
Pennsylvania.....	63	6	(NA)	(NA)	(NA)	(D)	(D)	(NA)	(D)	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay indus- try.....	39	5	337	1,460	300	494	1,259	2,907	1,004	840	3,858	893	606	4,664
East North Central, total.....	101	11	(NA)	(NA)	(NA)	1,158	2,724	(NA)	2,352	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay indus- try.....	33	5	282	1,357	231	422	991	3,868	908	372	4,775	373	2,748	28,880
Mines included in manufac- turing estab- lishments.....	68	6	(NA)	(NA)	(NA)	736	1,733	(NA)	1,444	(NA)	(D)	(NA)	(NA)	(NA)
Ohio, total.....	80	11	(NA)	(NA)	(NA)	939	2,243	(NA)	1,609	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay indus- try.....	24	5	242	1,162	198	347	818	3,443	611	293	4,067	280	430	6,103
Mines included in manufac- turing estab- lishments.....	56	6	(NA)	(NA)	(NA)	592	1,425	(NA)	998	(NA)	(D)	(NA)	(NA)	(NA)
Illinois.....	12	...	(NA)	(NA)	(NA)	151	337	(NA)	467	(NA)	232	(NA)	(NA)	(NA)
West North Central, total.....	52	3	(NA)	(NA)	(NA)	556	1,129	(NA)	1,595	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay indus- try.....	46	3	303	1,106	271	489	984	3,828	1,307	244	5,051	328	(²)	(²)
Mines included in manufac- turing estab- lishments.....	6	...	(NA)	(NA)	(NA)	67	145	(NA)	288	(NA)	(D)	(NA)	(NA)	(NA)
Missouri.....	48	3	(NA)	(NA)	(NA)	517	1,050	(NA)	1,506	(NA)	5,002	(NA)	(NA)	(NA)
South Atlantic.....	16	1	(NA)	(NA)	(NA)	250	634	(NA)	523	(NA)	193	(NA)	(NA)	(NA)
East South Central, total.....	30	3	(NA)	(NA)	(NA)	473	1,133	(NA)	731	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay indus- try.....	24	3	296	1,123	270	421	991	1,704	645	36	2,290	95	3,372	32,110
Mines included in manufac- turing estab- lishments.....	6	3	(NA)	(NA)	(NA)	52	142	(NA)	86	(NA)	(D)	(NA)	(NA)	(NA)
Kentucky, total...	17	3	(NA)	(NA)	(NA)	343	850	(NA)	539	(NA)	(D)	(NA)	(NA)	(NA)
Fire clay indus- try.....	14	...	231	907	215	333	833	1,452	520	18	1,944	46	260	969
Mines included in manufac- turing estab- lishments.....	3	...	(NA)	(NA)	(NA)	10	17	(NA)	19	(NA)	(D)	(NA)	(NA)	(NA)
West South Central..	13	1	(NA)	(NA)	(NA)	118	192	(NA)	199	(NA)	508	(NA)	(NA)	(NA)
Mountain, total....	18	...	(NA)	(NA)	(NA)	106	193	(NA)	126	(NA)	504	(NA)	(NA)	(NA)
Fire clay indus- try.....	15	...	40	153	38	81	147	466	91	3	504	56	80	549
Mines included in manufac- turing estab- lishments.....	3	...	(NA)	(NA)	(NA)	25	46	(NA)	35	(NA)	...	(NA)	(NA)	(NA)

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR FIRE CLAY MINES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Division, State, and industry	1958											1954		
	Establish- ments, number ¹		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
Pacific, total.....	15	1	(NA)	(NA)	(NA)	116	266	(NA)	256	(NA)	632	(NA)	(NA)	(NA)
Fire clay indus- try.....	11	...	38	168	33	52	144	442	199	16	632	25	66	764
Mines included in manufac- turing estab- lishments.....	4	1	(NA)	(NA)	(NA)	64	122	(NA)	57	(NA)	...	(NA)	(NA)	(NA)

NA Not available.

D Withheld to avoid approximately disclosing data for individual companies.

¹For mines included in establishments classified in the manufacturing industries, represents number of mines.²Figures for West North Central are combined with those for East North Central.³Figures for South Atlantic and West South Central are included with those for East South Central.

Table 3.—PRIMARY PRODUCTS OF THE FIRE CLAY INDUSTRY PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

Product	1958		1954	
	Quantity	Value	Quantity	Value
	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(\$1,000)
UNITED STATES				
Crude fire clay, total.....	8,714	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making clay products ¹	4,342	xxx	3,957	xxx
In making prepared clay.....	870	xxx	1,980	xxx
Shipments including interplant transfers.....	3,502	13,269	4,836	21,803
Prepared fire clay shipments including interplant transfers.....	1,048	6,165		
MIDDLE ATLANTIC				
Crude fire clay, total.....	1,632	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making clay products.....	798	xxx	811	xxx
In making prepared clay.....	122	xxx	2,607	xxx
Shipments including interplant transfers.....	712	3,232	3,861	36,128
Prepared fire clay shipments including interplant transfers.....	217	1,423		
Pennsylvania				
Crude fire clay, total.....	1,521	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making clay products.....	749	xxx	720	xxx
In making prepared clay.....	74	xxx	(NA)	xxx
Shipments including interplant transfers.....	698	3,135	3,815	35,436
Prepared fire clay shipments including interplant transfers.....	174	932		
NORTH CENTRAL				
Crude fire clay, total.....	4,542	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making clay products.....	2,140	xxx	1,873	xxx
In making prepared clay.....	559	xxx	21,126	xxx
Shipments including interplant transfers.....	1,843	6,523	32,482	311,797
Prepared fire clay shipments including interplant transfers.....	611	3,646		

See footnotes at end of table.

Table 3.—PRIMARY PRODUCTS OF THE FIRE CLAY INDUSTRY PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
EAST NORTH CENTRAL				
Crude fire clay.....	3,077	xxx	(NA)	xxx
Crude and prepared fire clay shipments including interplant transfers.....	1,305	5,149	(NA)	(NA)
Ohio				
Crude fire clay.....	2,353	xxx	42,442	xxx
Crude and prepared fire clay shipments including interplant transfers.....	1,005	4,453	31,437	37,565
WEST NORTH CENTRAL				
Crude fire clay.....	1,465	xxx	} (NA)	xxx
Crude and prepared fire clay shipments including interplant transfers.....	1,149	5,020		
Missouri				
Crude fire clay.....	1,314	xxx	41,080	xxx
SOUTH				
Crude fire clay, total.....	1,497	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making clay products.....	902	xxx	1,074	xxx
In making prepared clay.....	170	xxx	165	xxx
Shipments including interplant transfers.....	425	2,386	} 3442	32,564
Prepared fire clay shipments including interplant transfers.....	170	600		
SOUTH ATLANTIC				
Crude fire clay.....	431	xxx	(NA)	xxx
EAST SOUTH CENTRAL				
Crude fire clay.....	517	xxx	(NA)	xxx
Kentucky				
Crude fire clay, total.....	322	xxx	(NA)	xxx
Mined and used in the same establishment in making clay products.....	29	xxx	(D)	xxx
Shipments including interplant transfers.....	293	1,950	3183	31,105
WEST SOUTH CENTRAL				
Crude fire clay.....	548	xxx	(NA)	xxx
WEST				
Crude fire clay, total.....	1,043	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making clay products.....	502	xxx	199	xxx
In making prepared clay.....	19	xxx	2144	xxx
Shipments including interplant transfers.....	522	1,128	} 3652	31,798
Prepared fire clay shipments including interplant transfers.....	50	496		
MOUNTAIN				
Crude fire clay.....	325	xxx	(NA)	xxx
Crude and prepared fire clay shipments including interplant transfers.....	191	573	(NA)	(NA)
PACIFIC				
Crude fire clay.....	717	xxx	(NA)	xxx
Crude and prepared fire clay shipments including interplant transfers.....	381	1,051	(NA)	(NA)

D Withheld to avoid approximately disclosing data for individual companies.

xxx Not applicable.

NA Not available.

¹Represents fire clay used in making brick, tile, clay refractories, other structural clay products, and pottery and related products.²Includes clay received from other establishments for preparation; for United States as a whole, the total quantity of crude clay received was 62 thousand tons.³Represents shipments of both crude and prepared fire clay by the Fire Clay Industry and by mines operated as parts of manufacturing establishments. The value figure includes the value of secondary products and services of establishments classified in the Fire Clay Industry; for the United States as a whole the value of such secondary products and services was \$1,398 thousand.⁴Represents fire clay mined and used in the same establishment in making clay products plus shipments of crude and prepared fire clay.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC (P) -14E-3

KAOLIN AND BALL CLAY

(S.I.C. CODE 1455)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Kaolin and Ball Clay Industry were valued at \$42.7 million, an increase of 34 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 16 percent from 1954 to 1958 to a total of 3,639 employees in 1958. Value added in mining in the industry amounted to \$31.4 million in 1958, an increase of 24 percent over 1954, when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy,

contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE KAOLIN AND BALL CLAY INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	53	54	195
With 20 or more employees.....	...do.....	26	28	(NA)
All employees:				
Number.....	Number.....	3,639	3,148	3,434
Payroll.....	Thousand dollars..	14,011	9,943	2,467
Production and development workers:				
Number.....	Number.....	2,722	2,820	3,168
Man-hours.....	Thousands.....	5,681	6,159	5,987
Wages.....	Thousand dollars..	9,727	8,115	1,830
Value added in mining.....	...do.....	31,403	25,249	5,437
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	12,524	8,333	1,802
Contract work only.....	...do.....	504	1,362	135
Cost of purchased machinery installed.....	...do.....	2,816	2,601	(NA)
Value of shipments and receipts.....	...do.....	42,735	31,892	7,239
Capital expenditures.....	...do.....	4,008	4,291	(NA)

NA Not available.

¹Represents number of mines.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Kaolin and Ball Clay Industry represents establishments engaged primarily in mining, milling, and otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Kaolin and Ball Clay Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. Over 98 percent of the total value of shipments and other receipts of establishments classified in the Kaolin and Ball Clay Industry represented products primary to the industry, while the remainder represented products primary to other industries, and receipts for resales and sales of scrap.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that the value of crude and prepared kaolin and ball clay net shipments by all industries was \$45.1 million. Of this total, \$42.1 million, or 93 percent, was net shipments by establishments classified in the Kaolin and Ball Clay Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in Table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.—GENERAL STATISTICS FOR THE KAOLIN AND BALL CLAY INDUSTRY, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	53	26	3,639	14,011	2,722	5,681	9,727	31,403	12,524	2,816	42,735	4,008	3,148	25,249
Northeast, North Central, and South Atlantic.....	32	19	3,180	12,250	2,330	4,849	8,425	25,516	11,008	2,569	35,539	3,554	2,721	20,355
South Carolina.....	7	5	389	1,422	339	692	1,074	3,153	1,472	207	4,608	224	413	3,009
Georgia.....	18	12	2,403	8,970	1,822	3,855	6,924	21,267	9,046	2,154	29,384	3,083	2,057	16,486
South Central.....	15	7	359	1,287	297	652	862	4,469	1,346	206	5,619	402	321	3,268
Kentucky.....	5	2	96	334	79	206	229	856	416	124	1,263	133	83	1,078
Tennessee.....	7	4	222	799	184	384	536	2,891	750	73	3,454	260	201	1,783
West.....	6	...	100	474	95	180	440	1,418	170	41	1,577	52	106	1,626

Table 3.—PRIMARY PRODUCTS OF THE KAOLIN AND BALL CLAY INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
Crude kaolin and ball clay prepared ¹	2,770	xxx	² 2,295	xxx
Crude kaolin and ball clay net shipments, including interplant transfers.....	190	1,432	2,115	31,170
Prepared kaolin and ball clay shipped, including interplant transfers.....	2,373	43,692		

xxx Not applicable.

¹Represents kaolin and ball clay mined and prepared at same establishment and kaolin and ball clay received from other establishments for preparation.²Represents kaolin and ball clay prepared in the mineral industries only.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF COMMERCE

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MLC-14E-4

FELDSPAR AND MAGNESITE AND BRUCITE

(S.I.C. CODES 1456 AND 1457)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Feldspar Industry were valued at \$6.9 million, an increase of 3 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 9 percent from 1954 to 1958 to a total of 563 employees in 1958. Value added in mining in the industry amounted to \$4.6 million in 1958, an increase of 13 percent over 1954, when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value

of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.—GENERAL STATISTICS FOR THE FELDSPAR INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	74	84	¹ 59	51
With 20 or more employees.....	...do.....	10	10	(NA)	(NA)
All employees:					
Number.....	Number.....	563	616	566	693
Payroll.....	Thousand dollars..	1,898	1,722	496	730
Production and development workers:					
Number.....	Number.....	496	579	512	598
Man-hours.....	Thousands.....	1,035	1,235	1,016	(NA)
Wages.....	Thousand dollars..	1,512	1,523	383	527
Value added in mining.....	...do.....	4,559	4,048	859	1,599
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	2,349	2,735	² 122	² 336
Cost of purchased machinery installed.....	...do.....	1,260	294	(NA)	28
Value of shipments and receipts.....	...do.....	6,879	6,669	(NA)	(NA)
Value of net shipments and receipts.....	...do.....	6,458	6,239	981	1,935
Capital expenditures.....	...do.....	1,289	408	(NA)	(NA)

NA Not available.

¹Represents number of mines.²Excludes cost of minerals received for preparation.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

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Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00

During 1958, shipments of the Magnesite and Brucite Industry were valued at \$7.3 million. The production of crude magnesite and brucite in 1958 was approximately 508 thousand tons, an increase of 22 percent over 1954. Average employment in the Magnesite and Brucite Industry in 1958 was 337 employees, and value added in mining in the industry amounted to \$6.0 million.

The Feldspar Industry represents establishments engaged primarily in mining, milling, grinding, or otherwise preparing crude feldspar. The Magnesite and Brucite Industry represents establishments engaged primarily in mining, milling, or otherwise preparing crude magnesite or brucite. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Feldspar and Magnesite and Brucite Industries consisted not only of products described above as primary to these industries, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Feldspar Industry amounted to \$6.9 million dollars. Of this total, \$6.3 million were products primary to the industry, and \$0.6 million were products primary to other industries. No receipts for products primary to other industries were reported by the Magnesite and Brucite Industry.

The total value of shipments for these industries, which is the total value of receipts of establishments classified in these industries, should be clearly distinguished from the total value of primary products of these industries shipped by all producers. Figures on the value of primary products wherever made appear in

table 3. For feldspar, the total value of shipments of prepared material was \$6.6 million in 1958, of which about 81 percent represented shipments by the Feldspar Industry. There was no magnesite or brucite mined in 1958 by industries other than the Magnesite and Brucite Industry.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (Tables 1 and 2) with product statistics (Table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

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Table 1B.--GENERAL STATISTICS FOR THE MAGNESITE AND BRUCITE INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954 ¹	1939	1929
Establishments:					
Total.....	Number.....	4	4	24	5
With 20 or more employees.....	..do.....	3	2	(NA)	(NA)
All employees:					
Number.....	Number.....	337	132	228	378
Payroll.....	Thousand dollars..	1,925	539	324	554
Production and development workers:					
Number.....	Number.....	267	121	216	351
Man-hours.....	Thousands.....	529	237	437	(NA)
Wages.....	Thousand dollars..	1,386	469	300	466
Value added mining.....	..do.....	5,976	1,372	1,289	1,448
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	2,167	283	107	596
Cost of purchased machinery installed.....	..do.....	114	17	(NA)	44
Value of shipments and receipts.....	..do.....	7,270	1,655	1,396	2,044
Capital expenditures.....	..do.....	987	17	(NA)	(NA)

NA Not available.

¹For 1954, and possibly for earlier years, excludes data for associated calcining operations.²Represents number of mines.

Table 2.—GENERAL STATISTICS FOR THE FELDSPAR INDUSTRY, BY REGIONS OR DIVISIONS: 1958 AND 1954

Region or Division	1958												1954	
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)		
United States, total.....	74	10	563	1,898	496	1,035	1,512	4,559	2,349	1,260	6,879	1,289	616	4,048
New England.....	10	2	74	274	62	138	199	347	238	25	581	29	156	858
West North Central (South Dakota).....	15	1	47	128	42	81	122	471	129	182	515	267	74	502
South.....	27	6	359	1,119	322	653	900	2,641	1,623	962	4,331	895	341	2,206
West.....	22	1	83	377	70	163	291	1,100	359	91	1,452	98	45	482

Table 3.—PRIMARY PRODUCTS OF THE FELDSPAR AND MAGNESITE AND BRUCITE INDUSTRIES PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
Feldspar mined and processed at establishments classified in the feldspar industry and other mineral industries:						
Crude feldspar.....	480	120	886	711	161	1,172
Crushed and ground feldspar.....	382	382	5,402	350	350	5,233
Feldspar processed at establishments classified in the manufacturing industries:						
Ground feldspar.....	(NA)	83	1,186	(NA)	90	1,503
Magnesite and brucite.....	1508	2154	27,270	1416	2337	21,655

NA Not available.

¹For 1958, represents crude material mined and prepared at same establishment plus material mined and shipped; no magnesite or brucite was reported received by establishments in this industry for preparation. For 1954, represents production of crude material.²For 1958, represents shipments of both crude and calcined material; less than one percent of these shipments represented crude material. For 1954, represents shipments of crude material, and transfers of crude or crushed and ground material to associated calcining plants.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

April 1960

MIC(P)-14E-5

MISCELLANEOUS CLAYS

(S.I.C. CODE 1459)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified, Industry were valued at \$22.0 million, an increase of 63 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 57 percent from 1954 to 1958 to a total of 1.8 thousand employees in 1958. Value added in mining in the industry amounted to \$13.1 million in 1958, an increase of 34 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract

work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—SUMMARY STATISTICS FOR CLAY, CERAMIC, AND REFRACTORY MINERALS, N.E.C., MINES IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958			1954			1939
		Total	Mines and plants classified in the clay, ceramic, and refractory minerals, n.e.c., industry	Mines included in establishments classified in manufacturing industries ¹	Total	Mines and plants classified in the clay, ceramic, and refractory minerals, n.e.c., industry	Mines included in establishments classified in manufacturing industries ¹	
Establishments:								
Total.....	Number.....	699	122	2,577	801	183	2,618	2,617
With 20 or more employees.....	.....do.....	43	33	210	(NA)	20	(NA)	(NA)
All employees:								
Number.....	Number.....	(NA)	1,803	(NA)	(NA)	1,151	(NA)	3,066
Payroll.....	Thousand dollars	(NA)	6,993	(NA)	(NA)	3,823	(NA)	2,986
Production and development workers:								
Number.....	Number.....	(NA)	1,578	(NA)	(NA)	1,053	(NA)	2,989
Man-hours.....	Thousands.....	6,821	3,284	3,537	7,375	2,174	5,201	5,646
Wages.....	Thousand dollars	12,641	5,587	7,054	11,474	3,412	8,062	2,861
Value added in mining.....	.....do.....	(NA)	13,094	(NA)	(NA)	9,783	(NA)	5,124
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work	.....do.....	15,960	9,717	6,243	10,620	4,412	6,208	1,357
Contract work only.....	.....do.....	(NA)	592	(NA)	(NA)	1,190	(NA)	99
Cost of purchased machinery installed.....	.....do.....	(NA)	1,943	(NA)	(NA)	1,161	(NA)	(NA)
Value of shipments and receipts.....	.....do.....	22,354	22,005	349	13,751	13,504	247	6,481
Quantity of clay shipped or used in making cement and clay products.....	Thousand short tons.....	30,071	4,818	25,253	29,890	3,836	26,054	16,035
Capital expenditures.....	Thousand dollars	(NA)	2,749	(NA)	(NA)	1,852	(NA)	(NA)

NA Not available.

¹Represents common clay and shale mines operated as parts of establishments in the following manufacturing industries: Cement,hydraulic; Brick and structural clay tile; Ceramic tile and floor tile; Clay refractories; Structural clay products, n.e.c.; Vitreous china table and kitchen articles; and Pottery products, n.e.c.

²Represents number of mines.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Clay, Ceramic, and Refractory Minerals, N.E.C., Industry represents establishments engaged primarily in mining, milling, or otherwise preparing ceramic or refractory minerals, not elsewhere classified, such as andalusite, aplite, dumortierite, kyanite, olivine, pinite, sillimanite, and topaz (non-gem). Establishments producing common clay and shale in conjunction with the manufacture of cement and clay products are classified in Major Group 32. Such mines produced about 80 percent of all crude common clay and shale in 1958. Separate figures are shown for both types of mines in tables 1 and 2.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Clay, Ceramic, and Refractory Minerals, N.E.C., Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Clay, Ceramic, and Refractory Minerals, N.E.C., Industry amounted in 1958 to \$22.0 million. Of this total, only one percent represents products primary to other industries and receipts for contract services.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures appear in table 3. The total value of crude and prepared clays and related products which are primary products of the Clay, Ceramic, and Refractory Minerals, N.E.C., Industry in 1958 was \$32.2 million, of which \$19.0 million represented shipments by that industry. Production of crude clays and related products primary to this industry was approximately 31.9 million tons in 1958, of which 6.3 million was produced at mines classified in the

Clay, Ceramic, and Refractory Minerals, N.E.C., Industry; 25.3 million tons at mines included in establishments classified in the manufacturing industries (chiefly for use in the same establishment in making cement, brick, tile, clay refractories, other structural clay products, and pottery and related products); and 0.3 million as secondary products of other mineral industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.--GENERAL STATISTICS FOR CLAY, CERAMIC, AND REFRACTORY MINERALS, N.E.C., MINES, BY DIVISIONS AND STATES: 1958 AND 1954

Division, State, and Industry	1958												1954	
	Establish- ments, ¹ number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- turea	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States, total.....	699	41	(NA)	(NA)	(NA)	6,821	12,641	(NA)	15,960	(NA)	22,354	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	122	33	1,803	6,993	1,578	3,284	5,587	13,094	9,717	1,943	22,005	2,749	1,151	9,783
Minea included in manufac- turing es- tablishments....	577	8	(NA)	(NA)	(NA)	3,537	7,054	(NA)	6,243	(NA)	349	(NA)	(NA)	(NA)
New England.....	22	...	(NA)	(NA)	(NA)	71	141	(NA)	68	(NA)	...	(NA)	(NA)	(NA)
Middle Atlantic, total.....	92	5	(NA)	(NA)	(NA)	707	1,670	(NA)	1,295	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	12	2	99	525	86	184	414	649	665	182	1,315	181	² 176	² 1,480
Mines included in manufac- turing es- tablishments....	80	3	(NA)	(NA)	(NA)	523	1,256	(NA)	630	(NA)	(D)	(NA)	(NA)	(NA)
New York.....	24	2	(NA)	(NA)	(NA)	267	635	(NA)	410	(NA)	(D)	(NA)	(NA)	(NA)
Pennsylvania.....	54	1	(NA)	(NA)	(NA)	277	654	(NA)	508	(NA)	144	(NA)	(NA)	(NA)
East North Central, total.....	150	8	(NA)	(NA)	(NA)	1,354	2,833	(NA)	3,433	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	20	5	370	1,064	317	479	897	1,892	1,898	221	3,242	769	87	753
Mines included in manufac- turing es- tablishments....	130	3	(NA)	(NA)	(NA)	875	1,936	(NA)	1,535	(NA)	(D)	(NA)	(NA)	(NA)
Ohio, total.....	71	2	(NA)	(NA)	(NA)	505	1,112	(NA)	1,100	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	6	1	47	260	36	93	199	643	457	12	1,098	14	19	203
Mines included in manufac- turing es- tablishments....	65	1	(NA)	(NA)	(NA)	412	913	(NA)	643	(NA)	(D)	(NA)	(NA)	(NA)
Illinois, total.....	39	4	(NA)	(NA)	(NA)	481	923	(NA)	1,087	(NA)	1,058	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	8	3	256	504	223	264	445	759	813	125	1,058	639	19	137
Mines included in manufac- turing es- tablishments....	31	1	(NA)	(NA)	(NA)	217	478	(NA)	274	(NA)	...	(NA)	(NA)	(NA)
Michigan.....	14	1	(NA)	(NA)	(NA)	141	373	(NA)	794	(NA)	(D)	(NA)	(NA)	(NA)
West North Central, total.....	69	2	(NA)	(NA)	(NA)	604	1,205	(NA)	1,841	(NA)	2,257	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	14	2	147	650	126	288	540	1,119	1,157	85	2,257	104	116	1,135
Mines included in manufac- turing es- tablishments....	55	...	(NA)	(NA)	(NA)	316	665	(NA)	684	(NA)	...	(NA)	(NA)	(NA)
Missouri.....	17	1	(NA)	(NA)	(NA)	216	483	(NA)	893	(NA)	(D)	(NA)	(NA)	(NA)
South Atlantic total.....	105	10	(NA)	(NA)	(NA)	1,613	2,604	(NA)	3,702	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	19	10	493	2,044	422	988	1,528	4,788	2,644	653	7,098	738	325	2,538
Minea included in manufac- turing es- tablishments....	86	...	(NA)	(NA)	(NA)	625	1,076	(NA)	1,058	(NA)	(D)	(NA)	(NA)	(NA)

See footnotes at end of table.

Table 2.--GENERAL STATISTICS FOR CLAY, CERAMIC, AND REFRACTORY MINERALS, N.E.C., MINES, BY DIVISIONS AND STATES: 1958 AND 1954--Continued

Division, State, and Industry	1958											1954		
	Establish- ments, number ¹		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)		(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
South Atlantic—Con.														
Virginia, total...	26	6	(NA)	(NA)	(NA)	642	1,035	(NA)	1,563	(NA)	3,566	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	9	6	273	1,201	222	530	856	2,196	1,405	566	3,566	601	115	887
Mines included in manufac- turing es- tablishments....	17	...	(NA)	(NA)	(NA)	112	179	(NA)	158	(NA)	...	(NA)	(NA)	(NA)
North Carolina, total.....	33	2	(NA)	(NA)	(NA)	392	581	(NA)	1,223	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	6	2	103	418	94	230	333	1,453	898	60	2,317	94	59	513
Mines included in manufac- turing es- tablishments....	27	...	(NA)	(NA)	(NA)	162	248	(NA)	325	(NA)	(D)	(NA)	(NA)	(NA)
Georgia.....	14	1	(NA)	(NA)	(NA)	278	517	(NA)	449	(NA)	(D)	(NA)	(NA)	(NA)
East South Central, total.....	60	4	(NA)	(NA)	(NA)	571	861	(NA)	1,069	(NA)	1,446	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	9	4	149	499	133	258	375	925	519	70	1,446	68	113	577
Mines included in manufac- turing es- tablishments....	51	...	(NA)	(NA)	(NA)	313	486	(NA)	550	(NA)	...	(NA)	(NA)	(NA)
Alabama.....	24	1	(NA)	(NA)	(NA)	236	329	(NA)	288	(NA)	(D)	(NA)	(NA)	(NA)
West South Central, total.....	101	8	(NA)	(NA)	(NA)	1,207	1,774	(NA)	2,571	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	15	7	341	1,274	312	725	1,021	2,199	1,591	489	3,684	595	164	1,803
Mines included in manufac- turing es- tablishments....	86	1	(NA)	(NA)	(NA)	482	753	(NA)	980	(NA)	(D)	(NA)	(NA)	(NA)
Louisiana.....	13	2	(NA)	(NA)	(NA)	190	336	(NA)	617	(NA)	(D)	(NA)	(NA)	(NA)
Texas, total.....	62	5	(NA)	(NA)	(NA)	605	887	(NA)	1,349	(NA)	2,168	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	8	4	139	507	128	301	423	1,346	828	197	2,168	203	73	520
Mines included in manufac- turing es- tablishments....	54	1	(NA)	(NA)	(NA)	304	464	(NA)	521	(NA)	...	(NA)	(NA)	(NA)
Mountain, total.....	32	1	(NA)	(NA)	(NA)	254	546	(NA)	762	(NA)	1,183	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	15	1	98	437	88	176	385	656	579	85	1,183	137	34	357
Mines included in manufac- turing es- tablishments....	17	...	(NA)	(NA)	(NA)	78	161	(NA)	183	(NA)	...	(NA)	(NA)	(NA)

See footnotes at end of table.

Table 2.—GENERAL STATISTICS FOR CLAY, CERAMIC, AND REFRACTORY MINERALS, N.E.C., MINES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Division, State, and Industry	1958											1954		
	Establish- ments, number ¹		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
Pacific, total.....	68	3	(NA)	(NA)	(NA)	440	1,007	(NA)	1,219	(NA)	(D)	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	18	2	106	500	94	186	427	1,115	664	158	1,780	157	136	1,140
Mines included in manufac- turing es- tablishments....	50	1	(NA)	(NA)	(NA)	254	580	(NA)	555	(NA)	(D)	(NA)	(NA)	(NA)
California, total..	48	2	(NA)	(NA)	(NA)	309	721	(NA)	949	(NA)	1,323	(NA)	(NA)	(NA)
Clay, ceramic, and refractory minerals,n.e.c., industry.....	14	2	82	388	73	144	334	818	523	116	1,323	134	104	815
Mines included in manufac- turing es- tablishments....	34	...	(NA)	(NA)	(NA)	165	387	(NA)	426	(NA)	...	(NA)	(NA)	(NA)

NA Not available.

D Withheld to avoid approximately disclosing data for individual establishments.

¹For mines included in establishments classified in the manufacturing industries, represents number of mines.²Includes data for 4 establishments in New England. No establishments in this industry were reported in New England for 1958.

Table 3.—PRIMARY PRODUCTS OF THE CLAY, CERAMIC, AND REFRACTORY MINERALS, N.E.C., INDUSTRY PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954

Product, Division, and State	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
UNITED STATES				
Crude common clay and shale, total.....	31,585	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products ¹	24,827	xxx	25,803	xxx
In making prepared clay.....	4,776	xxx	22,892	xxx
Shipments including interplant transfers.....	1,982	2,806		
Prepared common clay and shale shipments including interplant transfers.....	3,686	26,654	4,560	11,592
Aplite, kyanite, laterite, and olivine:				
Mined and used in the same establishment in making prepared materials.....	331	xxx	(²)	xxx
Shipments including interplant transfers, crude and prepared.....	223	2,742	126	1,965
NEW ENGLAND				
Crude common clay and shale mined and used in the same establishment in making clay products ³	390	xxx	310	xxx
MIDDLE ATLANTIC				
Crude common clay and shale, total.....	3,458	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	3,002	xxx	3,098	xxx
In making prepared clay.....	267	xxx	(D)	xxx
Shipments including interplant transfers.....	190	316		
Prepared common clay and shale shipments including interplant transfers.....	216	1,042	4549	41,901
New York				
Crude common clay and shale.....	1,079	xxx	51,172	xxx
Pennsylvania				
Crude common clay and shale.....	1,764	xxx	51,859	xxx
EAST NORTH CENTRAL				
Crude common clay and shale, total.....	7,355	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	6,136	xxx	6,831	xxx
In making prepared clay.....	636	xxx	194	...
Shipments including interplant transfers.....	583	720		
Prepared common clay and shale shipments including interplant transfers.....	526	2,926	4683	41,333
Ohio				
Crude common clay and shale.....	3,048	xxx	52,696	xxx
Illinois				
Crude common clay and shale, total.....	1,789	xxx	51,854	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	1,501	xxx	(D)	xxx
In making prepared clay.....	254	xxx	(D)	xxx
Shipments including interplant transfers.....	34	54	(D)	(D)
Prepared common clay and shale shipments including interplant transfers.....	203	1,003	(D)	(D)
Michigan				
Crude common clay and shale.....	1,424	xxx	51,766	xxx
WEST NORTH CENTRAL				
Crude common clay and shale, total.....	2,719	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	2,112	xxx	2,297	xxx
In making prepared clay.....	384	xxx	340	xxx
Shipments including interplant transfers.....	223	308		
Prepared common clay and shale shipments including interplant transfers.....	363	2,303	4412	41,636
Missouri				
Crude common clay and shale.....	891	xxx	815	xxx
Shipments including interplant transfers.....	...	...	5141	5763
SOUTH ATLANTIC				
Crude common clay and shale, total.....	6,228	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	4,792	xxx	4,970	xxx
In making prepared clay.....	1,032	xxx	2844	xxx
Shipments including interplant transfers.....	404	479		
Prepared common clay and shale shipments including interplant transfers.....	964	5,679	4597	43,298

See footnotes at end of table.

Table 3.—PRIMARY PRODUCTS OF THE CLAY, CERAMIC, AND REFRACTORY MINERALS, N.E.C., INDUSTRY PRODUCED IN ALL INDUSTRIES, BY DIVISIONS AND STATES: 1958 AND 1954—Continued

Product, Division, and State	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
Virginia				
Crude common clay and shale.....	1,408	xxx	⁵ 805	xxx
North Carolina				
Crude common clay and shale.....	2,119	xxx	⁵ 1,618	xxx
Georgia				
Crude common clay and shale.....	1,362	xxx	⁵ 1,189	xxx
EAST SOUTH CENTRAL				
Crude common clay and shale, total.....	2,913	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	2,447	xxx	2,150	xxx
In making prepared clay.....	385	xxx	176	xxx
Shipments including interplant transfers.....	81	233	⁴ 365	⁴ 841
Prepared common clay and shale shipments including interplant transfers.....	289	1,488		
Alabama				
Crude common clay and shale.....	1,264	xxx	⁵ 1,215	xxx
WEST SOUTH CENTRAL				
Crude common clay and shale, total.....	5,309	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	3,687	xxx	2,974	xxx
In making prepared clay.....	1,505	xxx	600	xxx
Shipments including interplant transfers.....	117	78	⁴ 584	⁴ 2,284
Prepared common clay and shale shipments including interplant transfers.....	796	4,054		
Louisiana				
Crude common clay and shale.....	1,050	xxx	⁵ 880	xxx
Texas				
Crude common clay and shale, total.....	3,338	xxx	⁵ 2,073	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	2,277	xxx	(D)	xxx
In making prepared clay.....	1,058	xxx	(D)	xxx
Shipments including interplant transfers.....	3	3	(D)	(D)
Prepared common clay and shale shipments including interplant transfers.....	437	2,186	(D)	(D)
MOUNTAIN				
Crude common clay and shale, total.....	888	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	525	xxx	991	xxx
In making prepared clay.....	193	xxx	(D)	xxx
Shipments including interplant transfers.....	170	463	⁴ 272	⁴ 537
Prepared common clay and shale shipments including interplant transfers.....	166	1,035		
PACIFIC				
Crude common clay and shale, total.....	2,324	xxx	(NA)	xxx
Mined and used in the same establishment:				
In making cement and clay products.....	1,736	xxx	2,183	xxx
In making prepared clay.....	374	xxx	² 281	xxx
Shipments including interplant transfers.....	214	209	⁴ 542	⁴ 1,656
Prepared common clay and shale shipments including interplant transfers.....	366	8,127		
California				
Crude common clay and shale.....	1,947	xxx	⁵ 2,256	xxx

NA Not available.

xxx Not applicable.

D Withheld to avoid approximately disclosing data for individual companies.

¹Includes common clay and shale used in making such clay products as brick, tile, clay refractories, other structural clay products, and pottery and related products.²Figures for aplite, kyanite, and olivine prepared are included with those for common clay and shale prepared. Includes material received from other establishments for preparation, all reported in the Middle Atlantic and New England.³No other common clay or shale was reported produced in New England in 1958. For 1954, 83,000 tons of primary products of the Clay, Ceramic, and Refractory Minerals, N.E.C., Industry, valued at \$265 thousand, were reported shipped in New England by this industry and manufacturing establishments including common clay and shale mines as part of the establishment.⁴Represents shipments of both crude and prepared common clay and shale, and aplite, olivine, and kyanite concentrates by the Clay, Ceramic, and Refractory Minerals, N.E.C., Industry and by mines operated as parts of manufacturing establishments. The value figure includes the value of secondary products and services of establishments classified in the Clay, Ceramic, and Refractory Minerals, N.E.C., Industry, for the United States as a whole the value of such secondary products and services was about 5 percent of the total value of shipments of the industry.⁵Represents material mined and used in the same establishment in making clay products plus shipments of crude and prepared material described in footnote 4.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC(P)-14F-1

BARITE

(S.I.C. CODE 1472)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Barite Industry were valued at \$13.8 million, a decrease of 25 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 17 percent from 1954 to 1958 to a total of 933 employees in 1958. Value added in mining in the industry amounted to \$11.3 million in 1958, a decrease of 20 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--COMPARATIVE STATISTICS FOR THE BARITE INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	53	44	147	144
With 20 or more employees.....	...do.....	8	11	(NA)	(NA)
All employees:					
Number.....	Number.....	933	1,125	854	915
Payroll.....	Thousand dollars	3,424	3,874	752	834
Production and development workers:					
Number.....	Number.....	782	1,036	792	844
Man-hours.....	Thousands.....	1,608	2,403	1,439	(NA)
Wages.....	Thousand dollars	2,707	3,451	597	648
Value added in mining.....	...do.....	11,273	14,051	1,652	1,489
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	3,161	3,980	413	313
Cost of purchased machinery installed.....	...do.....	160	1,250	(NA)	154
Value of shipments and receipts.....	...do.....	13,765	18,269	2,065	1,802
Capital expenditures.....	...do.....	829	1,012	(NA)	(NA)

NA Not available.

¹Represents number of mines.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Barite Industry represents establishments engaged primarily in mining, milling, grinding, or otherwise preparing crude barite. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Barite Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Barite Industry amounted to \$13.8 million dollars. Of this total, however, over 99 percent represented products primary to the industry.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appears in table 3. No crude barite was shipped by other industries, but table 3 indicates that the value of shipments of prepared barite by all industries was \$28.6 million dollars. Of this

total, \$12.2 million dollars or 43 percent represented shipments by establishments classified in the barite mining industry while the remainder was shipped by establishments classified in other industries.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

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Table 2.—GENERAL STATISTICS FOR THE BARITE INDUSTRY, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)		
United States, total.....	55	8	933	3,424	782	1,608	2,707	11,273	3,161	160	13,765	829	1,125	14,051
West North Central..	21	3	311	1,084	274	563	932	4,488	848	11	5,008	339	379	2,381
South.....	17	4	551	2,033	440	905	1,494	5,867	2,110	97	7,645	429	687	10,967
West.....	15	1	71	307	68	140	281	918	203	52	1,112	61	59	703

Table 3.—PRIMARY PRODUCTS OF THE BARITE INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
Barite mined and processed at establishments classified in the barite industry:						
Crude barite.....	631	160	1,516	960	265	2,552
Prepared barite (crushed or ground, including flotation concentrates)....	470	467	12,156	1,628	638	15,746
Barite processed at establishments classified in other mineral industries or in manufacturing industries.....	(NA)	598	16,429	(NA)	607	17,092

NA Not available.

¹Represents production of crushed barite only.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC(P)-14F-2

FLUORSPAR

(S.I.C. CODE 1473)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Fluorspar Industry were valued at \$20 million, an increase of 29 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 2 percent from 1954 to 1958 to a total of 1,235 employees in 1958. Value added in mining in the industry amounted to \$13 million in 1958, an increase of 27 percent from 1954, when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased

machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE FLUORSPAR INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	¹ 1939	¹ 1929
Establishments:					
Total.....	Number.....	55	104	² 61	² 36
With 20 or more employees.....	do.....	12	15	(NA)	(NA)
All employees:					
Number.....	Number.....	1,235	1,260	1,396	1,171
Payroll.....	Thousand dollars..	5,614	4,866	1,362	1,402
Production and development workers:					
Number.....	Number.....	1,044	997	1,287	1,053
Man-hours.....	Thousands.....	2,010	2,001	2,568	(NA)
Wages.....	Thousand dollars..	4,334	3,451	1,134	1,112
Value added in mining.....	do.....	12,617	9,914	2,655	2,038
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	do.....	8,111	5,735	742	820
Minerals received for preparation only.....	do.....	3,301	1,728	(NA)	(NA)
Contract work only.....	do.....	1,131	804	57	17
Cost of purchased machinery installed.....	do.....	805	561	(NA)	140
Value of shipments and receipts.....	do.....	19,977	15,461	(NA)	(NA)
Value of net shipments and receipts.....	do.....	16,676	13,733	3,397	2,858
Capital expenditures.....	do.....	1,556	749	(NA)	(NA)

NA Not available.

¹Excludes data for nonproducing establishments as follows: for 1939, 1 establishment; for 1929, 4 establishments.²Represents number of mines.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Fluorspar Industry represents establishments engaged primarily in mining, milling, or otherwise preparing fluorspar. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Fluorspar Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Fluorspar Industry amounted to \$20.0 million dollars. Of this total, \$18.8 million were products primary to the industry and \$1.2 million were products primary to other industries and receipts for contract services.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure appears in table 3. In 1958, all primary products of the fluorspar industry, amounting to \$18.8 million, were produced by establishments classified in this industry.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is

significant, figures are shown both for "gross" and "net" shipments in Table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. The value of "gross" shipments for the Fluorspar Industry in 1958 was \$20.0 million, and the value of "net" shipments \$16.7 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE FLUORSPAR INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	55	12	1,235	5,614	1,044	2,010	4,334	12,617	8,111	805	19,977	1,556	1,260	9,914
East North Central (Illinois).....	25	7	1,830	13,713	691	1,286	2,772	6,593	3,578	432	9,629	974	682	5,426
South.....	11	2	164	674	134	257	509	1,386	2,940	138	4,317	147	215	974
West.....	19	3	241	1,227	219	467	1,053	4,638	1,593	235	6,031	435	2363	3,514

¹Includes central office employees in Missouri.²Includes central office employees in Missouri and Oklahoma.

Table 3.—PRIMARY PRODUCTS OF THE FLUORSPAR INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Total production	Total shipments (including interplant transfers) and receipts		Total Production	Total shipments (including interplant transfers) and receipts	
		Quantity	Value		Quantity	Value
	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(\$1,000)
UNITED STATES						
Crude fluorspar:						
Production and shipments.....	921	181	1,785	656	122	1,820
Mined and prepared at same establishment.....	733	xxx	xxx	517	xxx	xxx
Received from other establishments for preparation.....	xxx	185	3,301	xxx	112	1,728
Prepared fluorspar (crushed or ground, including flotation concentrates) production and shipments.....	342	366	16,996	253	256	12,682

xxx Not applicable.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

December 1959

MIC(P)-14F-3

POTASH, SODA, AND BORATE MINERALS

(S.I.C. CODE 1474)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Potash, Soda, and Borate Minerals Industry were valued at \$141 million, an increase of 31 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 3 percent from 1954 to 1958 to a total of 6,136 employees in 1958. Value added in mining in the industry amounted to \$111 million in 1958, an increase of 35 percent over 1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value

of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE POTASH, SODA, AND BORATE MINERALS INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of quantity	1958	1954	1939 ¹
Establishments:				
Total.....	Number.....	21	20	² 17
With 20 or more employees.....	..do.....	14	13	(NA)
All employees:				
Number.....	..do.....	6,136	6,322	2,438
Payroll.....	Thousand dollars.	37,043	33,439	4,756
Production and development workers:				
Number.....	Number.....	4,590	4,738	2,049
Man-hours.....	Thousands.....	9,213	9,381	4,388
Wages.....	Thousand dollars.	26,744	23,028	3,445
Value added in mining.....	..do.....	111,082	82,213	13,330
Cost of supplies, minerals received for preparation, supplies, fuel, purchased electricity, and contract work.....	..do.....	34,470	26,210	³ 3,701
Cost of purchased machinery installed.....	..do.....	6,919	8,390	(NA)
Value of shipments and receipts.....	..do.....	141,112	107,757	⁴ 17,031
Capital expenditures.....	..do.....	11,359	9,056	(NA)

NA Not available.

¹Excludes figures for 2 nonproducing mines and 1 nonproducing preparation plant.²Represents number of mines.³Excludes cost of minerals received for preparation.⁴Represents value of net production.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of 50 preliminary Census of Minerals reports, \$5.00

The Potash, Soda, and Borate Minerals Industry represents establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt). Products of this industry include potash salts, sodium borates (borax, kernite, ulexite), sodium carbonates (soda ash, trona), sodium sulfates (Glauber's salt), and colemanite. This report includes figures for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

This report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Potash, Soda, and Borate Minerals Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary to other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Potash, Soda, and Borate Minerals Industry in 1958 amounted to \$141 million, of which over 95 percent represented products primary to the industry.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures appear in table 3 and over 95 percent of the total of these figures represents production in the Potash, Soda, and Borate Minerals Industry while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation.

In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

More detailed figures for this industry will appear later in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Also, in this report, there will be a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. (Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.)

BACKGROUND

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The canvass included the continental United States, Alaska, and Hawaii. The figures in this report include the results for establishments located in the continental United States. Alaska and Hawaii were not States until 1959 and will be covered in separate reports.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight. Thus, the next Census will be conducted in 1964 covering mining activity in 1963.

1958 CENSUS OF MINERAL INDUSTRIES

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Table 2.--GENERAL STATISTICS FOR THE POTASH, SODA, AND BORATE MINERALS INDUSTRY, BY DIVISIONS AND STATES: 1958 AND 1954

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
United States, total.....	21	14	6,136	37,043	4,590	9,213	26,744	111,082	34,470	6,919	141,112	11,359	6,322	82,213
West South Central and Mountain.....	14	10	4,021	23,887	3,035	5,809	17,061	70,171	17,019	4,820	87,959	4,051	3,985	57,912
New Mexico.....	7	6	3,503	20,914	2,665	5,004	15,021	60,139	14,382	4,372	75,560	3,333	3,439	51,778
Other States.....	7	4	518	2,973	370	805	2,040	10,032	2,637	448	12,399	718	546	6,134
Pacific (California)	7	4	2,115	13,156	1,555	3,404	9,683	40,911	17,451	2,099	53,153	7,308	2,337	24,301

Table 3.--PRIMARY PRODUCTS OF THE POTASH, SODA, AND BORATE MINERALS INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Production (1,000 short tons)	Total net shipments including interplant transfers		Production (1,000 short tons)	Total net shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
Potassium salts:						
Crude salts.....	12,223	(2)	(2)	19,976	(NA)	(NA)
Processed or refined salts.....	3,699	24,002	282,468	3,323	3,271	71,836
Sodium carbonates.....	(NA)	639	17,175	545	527	13,535
Sodium sulfate.....	(NA)	3903	338,770	252	251	3,883
Boron compounds.....	(NA)			917	3556	314,816

¹Represents production from underground mines only. Does not include production from well brines or dry-lake brines; only shipments were reported for such operations.

²Crude salts are included with processed or refined salts, amounting to less than 0.5 percent of the total.

³The 1958 figure contains a higher proportion of refined borates than in 1954 which largely accounts for the higher value in the later year.

NA Not available.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF COMMERCE

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

January 1960

MIC(P)-14F-4

PHOSPHATE ROCK

(S.I.C. CODE 1475)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Phosphate Rock Industry were valued at \$132 million, an increase of 12 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this Industry showed a decrease of one percent from 1954 to 1958 to a total of 5,402 employees in 1958. Value added in mining in the industry amounted to \$64 million in 1958, an increase of 4 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE PHOSPHATE ROCK INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	65	75	140	133
With 20 or more employees.....	do.....	36	39	(NA)	(NA)
All employees:					
Number.....	Number.....	5,402	5,440	3,754	3,506
Payroll.....	Thousand dollars.	27,140	21,529	3,729	4,082
Production and development workers:					
Number.....	Number.....	3,961	4,579	3,372	3,201
Man-hours.....	Thousands.....	8,386	10,119	6,680	(NA)
Wages.....	Thousand dollars.	17,103	17,089	2,871	3,304
Value added in mining.....	do.....	64,366	62,089	9,003	9,497
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	do.....	67,323	59,069	3,283	3,547
Minerals received for preparation only.....	do.....	41,859	35,393	(NA)	(NA)
Contract work only.....	do.....	2,365	2,904	23	21
Cost of purchased machinery installed.....	do.....	6,057	8,156	(NA)	805
Value of shipments and receipts.....	do.....	132,089	117,976	(NA)	(NA)
Value of net shipments and receipts.....	do.....	97,960	82,583	12,286	13,044
Capital expenditures.....	do.....	5,657	11,338	(NA)	(NA)

NA Not available.

¹Represents number of mines.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Phosphate Rock Industry represents establishments engaged primarily in mining, milling, drying, or otherwise preparing phosphate rock, including apatite. Establishments primarily engaged in the production of phosphoric acid, superphosphates, or other manufactured phosphate compounds or chemicals are classified in Major Group 28 - Chemicals and Allied Products. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of Industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Phosphate Rock Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, of the total value of shipments and other receipts of establishments classified in the Phosphate Rock Industry, amounting to \$132 million dollars, over 99 percent represented products primary to the industry. There was no phosphate rock produced by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross"

and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments. Net shipments for the phosphate rock industry in 1958 amounted to \$98 million.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (Tables 1 and 2) with product statistics (Table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. This report will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.—GENERAL STATISTICS FOR THE PHOSPHATE ROCK INDUSTRY, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establis- ments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	65	36	5,402	27,140	3,961	8,386	17,103	64,366	67,323	6,057	132,089	5,657	5,440	62,089
East and South.....	56	29	4,749	23,747	3,407	7,299	14,370	57,229	62,694	5,574	120,822	4,675	4,739	55,620
South Atlantic (North Carolins and Florida)....	33	20	3,268	14,610	2,697	5,767	11,333	47,820	55,632	5,256	104,296	4,412	3,948	46,015
East South Central (Tennessee)....	18	8	760	3,630	645	1,416	2,837	8,721	6,521	311	15,301	252	791	9,605
Mountain.....	9	7	653	3,393	554	1,087	2,733	7,137	4,629	483	11,267	982	701	6,469
Idaho.....	4	3	181	1,035	136	293	733	2,798	2,078	41	4,855	62	(NA)	(NA)

NA Not available.

Table 3.—PRIMARY PRODUCTS OF THE PHOSPHATE ROCK INDUSTRY BY REGIONS AND STATES: 1958 AND 1954

Product and Region or State	1958			1954			
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers		
		Quantity (1,000 long tons)	Value (\$1,000)		Quantity (1,000 long tons)	Value (\$1,000)	
UNITED STATES							
Crude phosphste rock (ore or matrix), total.....	46,033	3,162	8,922	46,398	2,871	8,995	
Shipped to washer or contractor.....	xxx	1,826	3,839	xxx	(NA)	(NA)	
All other shipments.....	xxx	1,336	5,083	xxx	(NA)	(NA)	
Washed or concentrstred phosphate rock, total.....	12,679	8,492	41,607	11,303	10,149	36,199	
Shipped to drier.....	xxx	6,223	30,290	xxx	(NA)	(NA)	
All other shipments.....	xxx	2,269	11,317	xxx	(NA)	(NA)	
Dried, calcined, or sintered phosphste rock.....	10,874	10,927	81,440	10,815	10,571	72,715	
EAST AND SOUTH							
Crude phosphste rock (ore or matrix).....	43,729	1,529	2,190	}	(NA)	11,788	(NA)
Washed or concentrated phosphate rock.....	12,078	18,777	118,513				
Dried, calcined, or sintered phosphate rock.....	10,369						
SOUTH ATLANTIC (FLORIDA)							
Crude phosphste rock (ore or matrix).....	40,117	80	557	}	(NA)	19,641	(NA)
Washed or concentrated phosphate rock.....	10,712	7,645	37,733				
Dried, calcined, or sintered phosphate rock.....	9,354	9,383	66,003				
EAST SOUTH CENTRAL (TENNESSEE)							
Crude phosphste rock (ore or matrix).....	3,612	1,449	1,633	}	(NA)	12,147	(NA)
Washed or concentrstred phosphate rock.....	1,366	1,668	13,667				
Dried, calcined, or sintered phosphate rock.....	934						
MOUNTAIN							
Crude phosphate rock (ore or matrix).....	2,304	1,633	6,733	}	(NA)	11,599	(NA)
Washed or concentrated phosphate rock.....	601	642	4,534				
Dried, calcined, or sintered phosphate rock.....	505						

xxx Not applicable.

NA Not available.

1 Represents net shipments.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

December 1959

MIC(P)-14F-5

ROCK SALT

(S.I.C. CODE 1476)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Rock Salt Industry were valued at \$41 million, an increase of 16 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 2 percent from 1954 to 1958 to a total of 1,955 employees in 1958. Value added in mining in the industry amounted to \$34 million in 1958, an increase of 13 percent over 1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of

shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE ROCK SALT INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of quantity	1958	1954	1939
Establishments:				
Total.....	Number.....	22	15	17
With 20 or more employees.....	...do.....	11	12	(NA)
All employees:				
Number.....	...do.....	1,955	1,925	1,561
Payroll.....	Thousand dollars	10,867	8,571	1,974
Production and development workers:				
Number.....	Number.....	1,593	1,659	1,380
Man-hours.....	Thousands.....	3,501	3,861	2,608
Wages.....	Thousand dollars	7,930	7,117	1,434
Value added in mining.....	...do.....	33,884	30,013	5,721
Cost of supplies, fuel, and purchased electricity, and contract work.....	...do.....	8,039	6,297	1,175
Cost of purchased machinery installed.....	...do.....	2,110	1,534	(NA)
Value of shipments and receipts.....	...do.....	41,431	35,658	(NA)
Capital expenditures.....	...do.....	2,602	2,186	(NA)

NA Not available.

¹Represents number of mines. In 1954, the number of mines was the same as the number of establishments for this industry.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

The Rock Salt Industry represents establishments engaged primarily in mining, crushing, and screening rock salt. This report includes figures for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

This report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Rock Salt Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary to other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Rock Salt Industry amounted to \$41 million. Of this total, \$37 million were products primary to the industry, and \$4 million were products primary to other industries.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure appearing in table 3 indicates that the value of rock salt shipped by all producers of such products was \$40 million. Of this total, \$37 million or 93 percent were shipped by establishments classified in the Rock Salt Industry, while the remainder was shipped as secondary products by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation.

In general where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

More detailed figures for this industry will appear later in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Also, in this report, there will be a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. (Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.)

BACKGROUND

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight. Thus, the next Census will be conducted in 1964 covering mining activity in 1963.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.--GENERAL STATISTICS FOR THE ROCK SALT INDUSTRY, BY DIVISIONS: 1958 AND 1954

Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number.	Payroll	Number	Man- hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)		
UNITED STATES, TOTAL.....	22	11	1,955	10,867	1,593	3,501	7,930	33,884	8,039	2,110	41,431	2,602	1,925	30,013
North ¹	6	5	1,067	7,072	799	1,768	4,690	20,708	3,151	554	23,595	818	926	18,555
West South Central ²	5	5	807	3,347	722	1,485	2,846	12,408	4,494	1,469	16,666	1,705	999	11,458
West ³	11	1	81	448	72	248	394	768	394	87	1,170	79		

¹Establishments in New York, Michigan, and Kansas.²Establishments in Louisiana and Texas.³For 1958, establishments in New Mexico, Utah, Nevada, and California. For 1954, establishments in Utah, Nevada, and California.

Table 3.--SHIPMENTS OF ROCK SALT BY ALL INDUSTRIES, BY DIVISIONS: 1958 AND 1954

Division	Total shipments including interplant transfers			
	1958		1954	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
UNITED STATES, TOTAL.....	5,443	40,160	4,879	32,962
North ¹	3,583	24,495	3,432	21,772
West South Central ²	1,585	14,638		
West ³	275	1,027		

¹New York, Michigan, and Kansas.²Louisiana and Texas.³New Mexico, Utah, Nevada, and California.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

December 1959

MIC(P)-14F-6

SULFUR

(S.I.C. CODE 1477)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Sulfur Industry were valued at \$106 million, a decrease of 25 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 10 percent from 1954 to 1958 to a total of 3,678 employees in 1958. Value added in mining in the industry amounted to \$94 million in 1958, a decrease of 24 percent from 1954. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is considered to be for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

The Sulfur Industry represents establishments primarily engaged in mining native sulfur, including the extraction of native sulfur at well operations and mining and beneficiating

sulfur ore. Establishments primarily engaged in mining, preparing to mine, or concentrating pyrites or in recovering elemental sulfur from natural gas are classified in the Chemical and Fertilizer Mineral Mining, N.E.C., Industry. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

This report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Sulfur Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary to other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. For 1958, however, there were no shipments or receipts reported for other than the primary product, native sulfur. No native sulfur was produced in other industries in 1958.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others.

More detailed figures for this industry will appear later in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Also, in this report, there will be a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value

added." Similar preliminary reports and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. (Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to: Bureau of the Census, Washington 25, D. C.)

BACKGROUND

The 1958 Census of Mineral Industries is the fourteenth such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The canvass included the continental United States, Alaska, and Hawaii. The figures in this report include the results for establishments located in the continental United States. Alaska and Hawaii were not States until 1959 and will be covered in separate reports.

The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight. Thus, the next Census will be conducted in 1964 covering mining activity in 1963.

GENERAL STATISTICS FOR THE SULFUR INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929¹

Item	Unit of quantity	1958	1954	1939	1929 ¹
Establishments:					
Total.....	Number.....	24	20	² 10	² 10
With 20 or more employees.....	.....do.....	12	13	(NA)	(NA)
All employees:					
Number.....	.....do.....	3,678	4,095	2,024	2,504
Payroll.....	Thousand dollars	24,567	21,186	4,456	4,438
Production and development workers:					
Number.....	Number.....	2,303	3,077	1,517	2,199
Man-hours.....	Thousands.....	4,651	6,229	3,031	(NA)
Wages.....	Thousand dollars	13,264	14,619	2,545	3,483
Value added in mining.....	.....do.....	94,003	124,166	28,863	29,302
Cost of supplies, fuel, purchased electricity, and contract work.....	.....do.....	21,342	22,561	2,949	7,824
Contract work.....	.....do.....	7,495	2,833	116	10
Cost of purchased machinery installed.....	.....do.....	7,077	2,803	(NA)	1,634
Value of shipments and receipts ³.....	.....do.....	106,200	140,685	31,812	37,126
Native sulfur and sulfur ore:					
Production.....	1,000 long tons.	4,654	5,729	2,091	2,328
Shipments.....	.....do.....	4,619	5,510	(NA)	(NA)
Capital expenditures.....	Thousand dollars	16,222	8,845	(NA)	(NA)

NA Not available.

¹Includes statistics for pyrites; however, pyrites represented less than 2 percent of the value of products.

²Represents number of mines.

³For 1958, no receipts for secondary products or services were reported. For 1954, such receipts amounted to only \$24,000.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-14F-7

MISCELLANEOUS CHEMICAL AND FERTILIZER MINERAL MINING

(S.I.C. CODE 1479)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified, Industry were valued at \$9.6 million, a decrease of 56 percent from 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 53 percent from 1954 to 1958 to a total of 678 employees in 1958. Value added in mining in the industry amounted to \$7.6 million in 1958, a decrease of 58 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and

electric energy, contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this report for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE CHEMICAL AND FERTILIZER MINERAL MINING, N.E.C., INDUSTRY IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958	1954
Establishments:			
Total.....	Number.....	31	39
With 20 or more employees.....	..do.....	7	11
All employees:			
Number.....	Number.....	678	1,442
Payroll.....	Thousand dollars..	3,114	5,926
Production and development workers:			
Number.....	Number.....	558	1,209
Man-hours.....	Thousands.....	1,099	2,424
Wages.....	Thousand dollars..	2,357	4,569
Value added in mining.....	..do.....	7,590	18,074
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	2,538	4,801
Cost of purchased machinery installed.....	..do.....	116	3,360
Value of shipments and receipts.....	..do.....	9,642	21,780
Capital expenditures.....	..do.....	602	4,455



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Chemical and Fertilizer Mineral Mining, N.E.C., Industry represents establishments engaged primarily in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, not elsewhere classified, such as arsenic minerals, guano, lithium minerals, mineral pigments, pyrites and strontium minerals. Included in this industry are establishments primarily engaged in producing elemental sulfur from natural gas; separate statistics are shown for such establishments in Table 2.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Chemical and Fertilizer Mineral Mining, N.E.C., Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, the total value of shipments and other receipts of establishments classified in the Chemical and Fertilizer Mineral Mining, N.E.C., Industry amounted to \$9.6 million, of which over 99 percent represented products primary to the industry.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in Table 3, indicates that the value of shipments in 1958 of pyrites, elemental sulfur from all types of gas and crude oil, and miscellaneous chemical and fertilizer minerals which are primary products of this industry was \$21.8 million. Of this

total, 44 percent represented shipments by establishments classified in industry, while the remainder was shipped by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in Table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (Tables 1 and 2) with product statistics (Table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.--GENERAL STATISTICS FOR THE CHEMICAL AND FERTILIZER MINERAL MINING, N.E.C., INDUSTRY, BY REGIONS AND SUBINDUSTRIES: 1958 AND 1954

Region and subindustry	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	
United States, total.....	31	7	678	3,114	558	1,099	2,357	7,590	2,538	116	9,642	602	1,442	18,074
REGION														
East and South.....	20	4	475	2,037	390	732	1,528	4,749	1,770	88	6,269	338	(NA)	(NA)
West South Central.....	10	...	72	342	56	106	253	2,295	430	39	2,708	56	(NA)	(NA)
West.....	11	3	203	1,077	168	367	829	2,841	768	28	3,373	264	(NA)	(NA)
SUBINDUSTRY														
Pyrites.....	3	3	243	1,069	219	434	907	1,800	490	16	2,017	289	918	9,855
Elemental sulfur....	10	1	124	736	96	192	541	3,849	882	15	4,730	16	524	8,219
Miscellaneous chemical and fertilizer minerals	18	3	311	1,309	243	473	909	1,941	1,166	85	2,895	297		

NA Not available.

Table 3.--PRIMARY PRODUCTS OF THE CHEMICAL AND FERTILIZER MINERAL MINING, N.E.C., INDUSTRY PRODUCED IN ALL INDUSTRIES: 1958 AND 1954

Product	1958			1954		
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers	
		Quantity (1,000 long tons)	Value (\$1,000)		Quantity (1,000 long tons)	Value (\$1,000)
Pyrites.....	1,025	377	2,392	912	934	7,665
Recovered elemental sulfur, total.....	669	628	16,465	366	333	9,341
From natural gas.....	349	332	8,310	(NA)	(NA)	(NA)
From refinery gas and crude oil.....	320	296	8,155	(NA)	(NA)	(NA)
Miscellaneous chemical and fertilizer minerals.....	(NA)	(NA)	2,938	(NA)	(NA)	13,442

NA Not available.

²Represents "net shipments", that is gross shipments and interplant transfers less minerals received from other establishments for preparation.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D. C.

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U. S. DEPARTMENT OF COMMERCE

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

May 1960

MIC(P)-14G

NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES INDUSTRIES

(S.I.C. CODES 1481 AND 1482)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, receipts for services of the Nonmetallic Minerals (Except Fuels) Services Industries were \$7.7 million, an increase of 17 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in these industries showed an increase of 69 percent from 1954 to 1958 to a total of 1,081 employees in 1958. Value added in mining in these industries amounted to \$6.1 million in 1958, an increase of 25 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, purchases for resale, purchased fuels and electric energy, subcontract work, and purchased machinery from receipts and capital expenditures. It avoids the duplication in receipts which results from

one establishment performing services for another. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Receipts for services of the Nonmetallic Minerals Stripping Services Industry in 1958 were \$4.8 million, an increase of 53 percent from 1954 and receipts for services of the Nonmetallic Minerals Services Except Stripping Industry were \$2.9 million in 1958, a decrease of 17 percent from 1954.

Table 1.--SUMMARY STATISTICS FOR THE NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES INDUSTRIES IN THE UNITED STATES: 1958, 1954, AND 1959

Item	Unit of measure	1958			1954			1959
		Total	Nonmetallic minerals stripping services industry	Nonmetallic minerals services except stripping industry	Total	Nonmetallic minerals stripping services industry	Nonmetallic minerals services except stripping industry	
Establishments:								
Total.....	Number.....	74	46	28	62	42	20	65
With 20 or more employees.....	do.....	4	1	3	4	(NA)	(NA)	...
All employees:								
Number.....	Number.....	1,081	622	459	639	294	345	335
Payroll.....	Thousand dollars	3,369	1,880	1,489	2,327	1,031	1,296	368
Production and development workers:								
Number.....	Number.....	1,011	582	429	614	(NA)	(NA)	307
Man-hours.....	Thousands.....	1,843	1,064	779	1,258	569	689	632
Wages.....	Thousand dollars	2,910	1,609	1,301	2,214	(NA)	(NA)	320
Value added in mining services.....	do.....	6,128	3,876	2,252	4,884	2,251	2,633	725
Cost of supplies, purchases for resale, purchased fuel and electric energy, and subcontract work.....	do.....	1,659	1,023	636	1,666	859	807	1,241
Subcontract work only.....	do.....	112	103	9	213	(NA)	(NA)	(NA)
Cost of purchased machinery installed.....	do.....	564	387	177	402	268	134	(NA)
Receipts for services and other receipts.....	do.....	7,659	4,782	2,877	6,571	3,124	3,447	966
Capital expenditures.....	do.....	692	504	188	381	254	127	53

NA Not available. ¹Excludes cost of subcontract work.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Nonmetallic Minerals Stripping Services Industry represents establishments engaged primarily in overburden stripping and strip mining for nonmetallic minerals (except fuels) for others on a contract, fee, or other basis. The Nonmetallic Minerals (Except Fuels) Services Except Stripping Industry represents establishments primarily engaged in performing services, except stripping, for nonmetallic minerals (except fuels) for others on a contract, fee, or other basis.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Companies engaged in mining contract services, in general, submitted one report for all such services performed in all States. These reports were classified on the basis of the principal kind of work performed and the principal State in which the service was performed.

RECEIPTS FOR SERVICES

The receipts for services reported by establishments classified in the Nonmetallic Minerals (Except Fuels) Services Industries consisted not only of services described above as primary to the industry, but also included receipts for secondary services (which are primary in other industries), and receipts for products purchased and resold without further processing at the establishment. The total receipts of establishments classified in the Nonmetallic Minerals Stripping Services Industry amounted to \$7.7 million. Of this total, about 10 percent represented services primary to other industries, chiefly receipts for hauling services. For the Nonmetallic Minerals Services Except Stripping Industry, receipts for services amounted to \$2.9 million, of which receipts for secondary services amounted to about 5 percent.

The total receipts for services for an industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total receipts

for primary services of an industry by all contractors. Table 3 shows the combined receipts for services primary to the two contractor industries covered in this report as reported by all mining services industries. About ten percent of the services primary to the Nonmetallic Minerals Services Except Stripping Industry reported were performed by establishments classified in other mining services industries, and none of the services primary to the Nonmetallic Minerals Stripping Services Industries were reported by other mining services industries.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, receipts for services etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the performance of secondary contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with services statistics (table 3) which show the services performed by more than one industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 2.--GENERAL STATISTICS FOR THE NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES INDUSTRIES, BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954

Industry, Region or Division, and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining services	Cost of supplies, purchases for resale, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and other receipts	Capital expenditures	All employees, number	Value added in mining services
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total.....	74	4	1,081	3,369	1,011	1,843	2,910	6,128	1,659	564	7,659	692	639	4,884
Nonmetallic minerals stripping services industry.....	46	1	622	1,880	582	1,064	1,609	3,876	1,023	387	4,782	504	294	2,251
Nonmetallic minerals services except stripping industry.....	28	3	459	1,489	429	779	1,301	2,252	636	177	2,877	188	345	2,633
Northeast.....	6	...	23	98	16	34	56	273	98	59	334	96	33	353
East North Central...	10	...	66	288	61	127	240	633	414	81	1,022	106	73	554
West North Central...	9	...	51	245	44	89	176	648	182	75	863	42	16	146
South Atlantic.....	16	...	362	794	356	654	773	1,069	100	136	1,149	156	97	550
North Carolina.....	8	...	329	704	325	598	686	854	49	97	877	123	(NA)	(NA)
East South Central...	5	...	69	201	64	116	186	432	190	56	622	56	224	1,767
West South Central...	9	1	264	649	258	429	624	973	110	42	1,102	23	67	354
West.....	19	1	246	1,094	212	394	855	2,110	565	115	2,567	213	129	1,160
Nonmetallic minerals stripping services industry.....	13	1	135	620	116	188	463	1,538	442	40	1,882	138	(NA)	(NA)
Nonmetallic minerals services except stripping industry.....	6	...	111	474	96	206	392	562	123	75	685	75	(NA)	(NA)

Table 3.--RECEIPTS FOR SERVICES PRIMARY TO THE NONMETALLIC MINERALS STRIPPING SERVICES AND THE NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES, EXCEPT STRIPPING, INDUSTRIES PERFORMED IN BOTH INDUSTRIES: 1958 AND 1954

Type of service	Receipts for services (\$1,000)	
	1958	1954
UNITED STATES		
Services for nonmetallic minerals (except fuels) mining industries:		
Stripping overburden and strip mining.....	4,278	2,526
Prospect, test, and other drilling, including blasting.....	1,564	2,787
Other services primary to the nonmetallic minerals (except fuels) services industries.....	1,495	700

DEPARTMENT OF COMMERCE
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WASHINGTON 25, D. C.

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1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

February 1960

MIC(P)-14H-1

GYPSUM

(S.I.C. CODE 1492)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Gypsum Industry were valued at \$8.3 million, an increase of 24 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 12 percent from 1954 to 1958 to a total of 503 employees in 1958. Value added in mining in the industry amounted to \$6.8 million in 1958, an increase of 27 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--SUMMARY STATISTICS FOR GYPSUM MINING OPERATIONS IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958			1954			1939
		Total	Mines and plants classified in the Gypsum Industry	Mines included in establishments classified in the Gypsum Products Industry	Total	Mines and plants classified in the Gypsum Industry	Mines included in establishments classified in the Gypsum Products Industry	
Establishments:								
Total.....	Number.....	64	33	31	64	37	27	159
With 20 or more employees.....	...do.....	(NA)	5	(NA)	(NA)	5	(NA)	(NA)
All employees:								
Number.....	Number.....	(NA)	503	(NA)	(NA)	449	(NA)	1,424
Payroll.....	Thousand dollars	(NA)	2,134	(NA)	(NA)	1,852	(NA)	1,857
Production and development workers:								
Number.....	Number.....	(NA)	434	(NA)	(NA)	399	(NA)	1,327
Man-hours.....	Thousands.....	2,645	932	1,713	2,984	926	2,058	2,466
Wages.....	Thousand dollars	5,417	1,653	3,764	5,572	1,567	4,005	1,640
Value added in mining.....	...do.....	(NA)	6,800	(NA)	(NA)	5,352	(NA)	3,756
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	4,924	1,613	3,311	4,247	1,307	2,940	813
Cost of purchased machinery installed.....	...do.....	(NA)	695	(NA)	(NA)	2,395	(NA)	(NA)
Value of shipments and receipts ².....	...do.....	13,021	8,250	4,771	10,319	6,631	3,688	4,569
Production of crude gypsum.....	Thousand tons...	10,920	2,604	8,316	9,057	2,487	6,570	3,314
Capital expenditures.....	Thousand dollars	(NA)	858	(NA)	(NA)	2,423	(NA)	(NA)

NA Not available.

¹Represents number of mines.²For mines included in establishments classified in the Gypsum Products Industry in 1958 and 1954, represents shipments of crude and prepared gypsum only. Excludes the value of gypsum produced and used in the same establishment.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Gypsum Industry represents establishments engaged primarily in mining, quarrying, milling, or otherwise preparing gypsum. Calcining activities are excluded. It does not include mines operated as parts of establishments classified in the manufacturing industry, Gypsum Products; such mines produced about 73 percent of all crude gypsum in 1958. Separate figures are shown for both types of mines in tables 1 and 2. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Gypsum Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, such secondary receipts amounted to less than one percent of the total value of shipments and other receipts of establishments classified in the Gypsum Industry in 1958.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures appear in table 3. The total value of crude and crushed, ground, screened, or dried gypsum shipped by all industries in 1958 was \$17.5 million, of which only \$8.4 million represented shipments by

the Gypsum Industry. Production of crude gypsum amounted to 9.6 million tons in 1958, of which only 2.6 million was produced at mines classified in the Gypsum Industry and 7.0 million at mines included in establishments classified in other industries. Most of the latter was produced and used in the same establishment in the manufacture of gypsum products.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERALS INDUSTRIES

3

Table 2.—GENERAL STATISTICS FOR GYPSUM MINING OPERATIONS, BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954

Region or division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts ¹	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
Mines and plants classified in the Gypsum Industry United States, total.....	33	5	503	2,134	434	932	1,653	6,800	1,613	695	8,250	858	449	5,352
East and South.....	11	4	368	1,472	320	689	1,137	4,632	1,177	472	5,743	538	303	3,164
Mountain.....	10	...	67	332	60	122	289	816	243	115	1,044	130	92	1,372
Pacific.....	12	1	68	330	54	121	227	1,352	193	108	1,463	190	54	816
Mines included in establishments classified in the Gypsum Products Industry United States, total.....	31	(NA)	(NA)	(NA)	(NA)	1,713	3,764	(NA)	3,311	(NA)	4,771	(NA)	(NA)	(NA)
North.....	16	(NA)	(NA)	(NA)	(NA)	966	2,296	(NA)	1,822	(NA)	2,242	(NA)	(NA)	(NA)
South.....	7	(NA)	(NA)	(NA)	(NA)	526	971	(NA)	630	(NA)	1,394	(NA)	(NA)	(NA)
West.....	8	(NA)	(NA)	(NA)	(NA)	221	497	(NA)	859	(NA)	1,135	(NA)	(NA)	(NA)

(NA) Not available.

¹See table 1, footnote 2.

Table 3.—PRIMARY PRODUCTS OF THE GYPSUM INDUSTRY PRODUCED BY ALL INDUSTRIES, BY REGIONS: 1958 AND 1954

Product	1958			1954		
	Total production (1,000 short tons)	Total shipments (including interplant transfers)		Total production (1,000 short tons)	Total shipments (including interplant transfers)	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
UNITED STATES						
Crude gypsum, total.....	9,609	737	1,414	9,057	(¹)	(¹)
Produced by mines classified in the Gypsum Industry.....	2,604	737	1,414	2,487	(¹)	(¹)
Produced by mines included in establishments classified in the Gypsum Products Industry.....	7,005	...	...	6,570	(¹)	(¹)
Crushed, ground, screened, or dried gypsum, total.....	(NA)	3,829	16,093	(NA)	¹³ ,439	¹¹⁰ ,301
Produced at preparation plants included in establishments classified in the Gypsum Industry.....	1,874	1,861	6,955	(NA)	¹² ,479	¹⁶ ,613
Produced at preparation plants included in establishments classified in the manufacturing industries.....	(NA)	1,968	9,138	(NA)	¹ 960	¹³ ,688
NORTH						
Crude gypsum, total.....	4,422	...	...	(NA)	}	
Produced by mines classified in the Gypsum Industry.....	951	...	...	² 1,504		
Produced by mines included in establishments classified in the Gypsum Products Industry.....	3,471	...	...	(NA)		
Crushed, ground, screened, or dried gypsum.....	(NA)	1,860	8,792	(NA)		
SOUTH						
Crude gypsum, total.....	2,507	(D)	(D)	(NA)	}	(NA)
Produced by mines classified in the Gypsum Industry.....	451	(D)	(D)	(²)		
Produced by mines included in establishments classified in the Gypsum Products Industry.....	2,056	...	...	(NA)		
Crushed, ground, screened, or dried gypsum.....	(NA)	802	3,604	(NA)		
WEST						
Crude gypsum, total.....	2,680	(D)	(D)	(NA)	}	
Produced by mines classified in the Gypsum Industry.....	1,202	(D)	(D)	983		
Produced by mines included in establishments classified in the Gypsum Products Industry.....	1,478	...	...	(NA)		
Crushed, ground, screened, or dried gypsum, total.....	(NA)	1,167	3,697	(NA)		
Produced at preparation plants included in establishments classified in the Gypsum Industry.....	662	662	1,741	(NA)		
Produced at preparation plants included in establishments classified in the manufacturing industries.....	(NA)	505	1,956	(NA)		

D Withheld to avoid approximately disclosing figures for individual companies.

¹NA Not available.²Figures for crude gypsum are included with those for crushed, ground, screened, or dried gypsum.³Figures for the South are included with those for the North.

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

April 1960

MIC(P)-14H-2

MICA

(S.I.C. CODE 1493)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Mica Industry were valued at \$6.2 million, an increase of 50 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 2 percent from 1954 to 1958, to a total of 726 employees. Value added in mining in the industry amounted to \$4.7 million in 1958, an increase of 42 percent from 1954 when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and purchased machinery from value

of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.--GENERAL STATISTICS FOR THE MICA INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	148	498	¹ 21	24
With 20 or more employees.....	...do.....	7	6	(NA)	(NA)
All employees:					
Number.....	Number.....	726	710	210	249
Payroll.....	Thousand dollars	1,996	1,342	138	253
Production and development workers:					
Number.....	Number.....	648	668	190	226
Man-hours.....	Thousands.....	1,303	1,196	361	(NA)
Wages.....	Thousand dollars	1,697	1,255	118	195
Value added in mining.....	...do.....	4,669	3,284	276	415
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work....	...do.....	1,763	1,228	51	101
Contract work only.....	...do.....	263	347	...	...
Cost of purchased machinery installed.....	...do.....	730	474	(NA)	6
Value of shipments and receipts.....	...do.....	6,174	4,126	327	516
Capital expenditures.....	...do.....	988	860	(NA)	(NA)

NA Not available.

¹Represents number of mines.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Mica Industry represents establishments engaged primarily in mining, milling, or otherwise preparing mica. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Mica Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Mica Industry amounted to \$6.2 million. Of this total, less than one percent represented products primary to other industries.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure, appearing in table 3, indicates that the total value of crude and ground mica products shipped in 1958 was \$10.8 million. Of this total, \$6.1 million or 56 percent were shipped by establishments classified in the Mica Industry, while the remainder was shipped by establishments classified in other industries.

The total value of shipments for an industry contains some duplication introduced by

the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.--GENERAL STATISTICS FOR THE MICA INDUSTRY, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
			(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)				
United States, total.....	148	7	726	1,996	648	1,303	1,697	4,669	1,763	730	6,174	988	710	3,284
East.....	33	1	165	440	155	266	391	1,115	448	155	1,539	179	79	359
New Hampshire....	11	1	95	242	89	143	204	664	259	95	915	103	49	175
South.....	101	6	524	1,396	464	975	1,201	3,279	1,210	508	4,330	667	605	2,731
North Carolina...	82	4	391	986	356	738	904	2,533	728	232	3,139	354	556	2,548
Georgia.....	9	...	31	83	30	63	70	123	198	55	306	70	39	146
West.....	14	...	37	160	29	62	105	275	105	67	305	142	26	194

Table 3.--PRIMARY PRODUCTS OF THE MICA INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	Unit of measure	1958			1954	
		Total production (quantity)	Shipments including interplant transfers		Shipments including interplant transfers	
			Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
Hand-cobbed mica.....	1,000 pounds.....	3,407	3,395	849	927	244
Sheet mica.....	...do.....	392	395	2,702	458	2,254
Scrap (or flake) mica.....	short tons.....	114,883	53,099	1,267	55,238	746
Ground mica, total.....	...do.....	115,998	114,892	5,950	81,412	4,694
Mined and processed at establishments classified in the mineral industries.....	...do.....	72,498	71,385	2,332	45,303	1,539
Processed at establishments classified in the manufacturing industries.....	...do.....	43,500	43,507	3,618	36,109	3,155

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-14H-3

NATIVE ASPHALT AND BITUMENS AND PEAT INDUSTRIES

(S.I.C. CODE 1494 AND 1498)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Native Asphalt and Bitumens Industry were valued at \$8.0 million, an increase of 25 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 16 percent from 1954 to 1958 to a total of 464 employees in 1958. Value added in mining in the industry amounted to \$6.0 million in 1958, an increase of 23 percent from 1954, when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract

work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this report for changes in price levels from 1954 to 1958.

Table 1A.—SUMMARY STATISTICS FOR THE NATIVE ASPHALT AND BITUMENS INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	10	12	23	21
With 20 or more employees.....	..do.....	5	7	(NA)	(NA)
All employees:					
Number.....	Number.....	464	551	853	1,306
Payroll.....	Thousand dollars..	2,264	2,147	892	1,841
Production and development workers:					
Number.....	Number.....	367	451	730	1,123
Man-hours.....	Thousands.....	732	987	1,330	(NA)
Wages.....	Thousand dollars..	1,397	1,443	608	1,255
Value added in mining.....	..do.....	5,959	4,857	2,554	4,345
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	2,287	1,643	414	779
Contract work only.....	..do.....	406	170	1	84
Cost of purchased machinery installed.....	..do.....	517	476	(NA)	182
Value of shipments and receipts.....	..do.....	8,040	6,424	2,968	5,124
Capital expenditures.....	..do.....	723	552	(NA)	(NA)

NA Not available.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.

During 1958, shipments of the Peat Industry were valued at \$4.4 million, an increase of 88 percent over 1954. Average employment in this industry showed an increase of 10 percent from 1954 to 1958 to a total of 389 thousand employees in 1958. Value added in mining in the industry amounted to \$3.6 million in 1958, an increase of 100 percent from 1954 when the previous census was taken.

The Native Asphalt and Bitumens Industry represents establishments engaged primarily in mining, milling, or otherwise preparing native asphalt and bitumens, including gilsonite, wurtzilite, grahamite, and ozokerite. The mining of bituminous sandstone and bituminous limestone is also included. The Peat Industry represents establishments engaged primarily in mining peat, and in the preparation of peat.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Native Asphalt and Bitumens and Peat Industries consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, for the Native Asphalt and Bitumens Industry there were no secondary products or receipts for services. For the Peat Industry the value of secondary products, services, and the resale of products without processing, amounted to about 2 percent of the total value of shipments and receipts.

The total value of shipments for an industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of

primary products of the industry shipped by all producers. The latter figures appear in table 3. No primary products of either of these industries were produced in other industries.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishments," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 1B.—SUMMARY STATISTICS FOR THE PEAT INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	82	88	125
With 20 or more employees.....	...do.....	3	3	(NA)
All employees:				
Number.....	Number.....	389	353	184
Payroll.....	Thousand dollars..	1,279	940	144
Production and development workers:				
Number.....	Number.....	335	321	157
Man-hours.....	Thousands.....	623	637	246
Wages.....	Thousand dollars..	971	829	101
Value added in mining.....	...do.....	3,596	1,800	338
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	1,080	572	40
Contract work only.....	...do.....	127	46	...
Cost of purchased machinery installed.....	...do.....	479	159	(NA)
Value of shipments and receipts.....	...do.....	4,373	2,326	378
Capital expenditures.....	...do.....	782	205	(NA)

NA Not available.

¹Represents number of mines.

Table 2.—GENERAL STATISTICS FOR THE PEAT INDUSTRY, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for prepara- tion, supplies, purchased energy and contract work	Cost of pur- chased machin- ery in- stalled	Value of ship- ments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States, total.....	82	3	389	1,279	335	623	971	3,596	1,080	479	4,373	782	353	1,800
Northeast.....	21	1	90	298	77	121	208	559	111	91	589	172	101	411
North Central.....	29	2	209	745	178	364	558	2,208	807	211	2,944	282	153	888
Michigan.....	7	2	140	524	121	269	391	1,706	680	199	2,367	218	(NA)	(NA)
South.....	13	...	48	123	43	71	105	253	63	23	274	65	70	202
West.....	19	...	42	113	37	67	100	430	245	154	566	263	29	299

NA Not available.

Table 3.—PRIMARY PRODUCTS OF THE NATIVE ASPHALT AND BITUMENS AND PEAT INDUSTRIES, BY REGIONS AND STATES: 1958 AND 1954

Product and Region	1958			1954		
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers	
		Quantity	Value		Quantity	Value
		(1,000 short tons)	(1,000 short tons)		(1,000 short tons)	(1,000 short tons)	($1,000)	($1,000)
NATIVE ASPHALT AND BITUMENS (Gilsonite, bituminous limestone, and bituminous sandstone)						
United States, total.....	1,615	1,620	8,040	1,417	1,408	6,408
PEAT						
United States, total.....	357	355	4,297	249	248	2,307
Northeast.....	62	61	589	47	(NA)	1513
North Central.....	156	156	2,896	96	(NA)	11,217
Michigan.....	115	115	2,367	(NA)	(NA)	(NA)
South.....	46	45	274	45	(NA)	251
West.....	93	93	538	61	(NA)	134

NA Not available.

¹Includes the value of other products and receipts for services. However, these amounted to only \$19 thousand for the entire United States.

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DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

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U. S. DEPARTMENT OF COMMERCE

1958 Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC (P) -14H-4

PUMICE AND PUMICITE AND NATURAL ABRASIVES, EXCEPT SAND, INDUSTRIES

(S.I.C. CODES 1495 AND 1497)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Pumice and Pumicite Industry were valued at \$5.0 million, an increase of 47 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of 22 percent from 1954 to 1958 to a total of 326 employees in 1958. Value added in mining in the industry amounted to \$3.5 million in 1958, an increase of 27 percent from 1954, when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy, contract work, and

purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.--GENERAL STATISTICS FOR THE PUMICE AND PUMICITE INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	64	75	17
With 20 or more employees.....	..do.....	2	1	(NA)
All employees:				
Number.....	Number.....	326	267	127
Payroll.....	Thousand dollars	1,096	962	126
Production and development workers:				
Number.....	Number.....	271	223	122
Man-hours.....	Thousands.....	413	440	197
Wages.....	Thousand dollars	900	748	119
Value added in mining.....	..do.....	3,490	2,741	301
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	1,682	769	86
Contract work only.....	..do.....	151	276	...
Cost of purchased machinery installed.....	..do.....	248	298	(NA)
Value of shipments.....	..do.....	4,983	3,393	387
Capital expenditures.....	..do.....	437	415	(NA)

NA Not available.



U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

During 1958, shipments of the Natural Abrasives, except Sand, Industry were valued at \$3.4 million. Average employment in the Natural Abrasives Industry in 1958 was 231 employees, and value added in mining in the industry amounted to \$2.7 million.

The Pumice and Pumicite Industry represents establishments engaged primarily in mining, quarrying, milling or otherwise preparing pumice and pumicite (volcanic ash). The Natural Abrasives, except Sand Industry represents establishments engaged primarily in mining, quarrying, milling, or otherwise preparing natural abrasives, such as corundum, industrial diamonds, emery, garnet, and tripoli. This industry includes the shaping of natural abrasive stones at the quarry. Establishments primarily engaged in the production of blast, grinding, or polishing sand are classified in Industry 1441, and those primarily engaged in the production of diatomite in Industry 1499.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Pumice and Pumicite and Natural Abrasives, except Sand, Industries consisted not only of products described above as primary to these industries, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, in 1958, establishments classified in these industries had no secondary products or receipts for services.

The total value of shipments for these industries, which is the total value of receipts of establishments classified in these industries, should be clearly distinguished from the total value of primary products of these industries shipped by all producers. Figures on the value of primary products wherever made appear in

Table 3. For 1958, over 99 percent of the value of all primary products of the Pumice and Pumicite Industry was produced in that industry. For the Natural Abrasives, except Sand, Industry 96 percent of all primary products were produced in the industry.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in Table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishments," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

Table 1B.—GENERAL STATISTICS FOR THE NATURAL ABRASIVES, EXCEPT SAND, INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954 ¹	1939
Establishments:				
Total.....	Number.....	20	32	² 36
With 20 or more employees.....	...do.....	3	4	(NA)
All employees:				
Number.....	Number.....	231	285	443
Payroll.....	Thousand dollars.	1,016	1,161	479
Production and development workers:				
Number.....	Number.....	204	251	383
Man-hours.....	Thousands.....	409	524	798
Wages.....	Thousand dollars.	798	932	346
Value added in mining.....	...do.....	2,655	3,681	1,115
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	766	1,068	220
Contract work only.....	...do.....	62	188	...
Cost of purchased machinery installed.....	...do.....	84	123	(NA)
Value of shipments.....	...do.....	3,369	4,474	1,335
Capital expenditures.....	...do.....	136	398	(NA)

NA Not available.

¹Includes some establishments primarily engaged in producing quartz. For other years such establishments are included in the Crushed and Broken Stone and Sand and Gravel Industries. For 1954, the value of shipments of such establishments was \$984,000.²Represents number of mines.

Table 2.—GENERAL STATISTICS FOR THE PUMICE AND PUMICITE AND THE NATURAL ABRASIVES, EXCEPT SAND, INDUSTRIES, BY REGIONS OR DIVISIONS AND STATES: 1958 AND 1954

Region or Division and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
PUMICE AND PUMICITE INDUSTRY														
United States, total.....	64	2	326	1,096	271	413	900	3,490	1,682	248	4,983	437	267	2,741
West North Central and West South Central.....	9	1	44	162	36	44	133	253	219	55	467	60	28	118
Mountain.....	27	...	124	448	101	194	396	1,502	1,112	92	2,571	135	98	1,414
Arizona.....	5	...	26	84	22	31	71	422	645	17	1,032	52	(NA)	(NA)
New Mexico.....	10	...	70	254	52	111	220	736	304	55	1,032	63	64	850
Pacific.....	28	1	158	486	134	175	371	1,735	351	101	1,945	242	141	1,209
California.....	23	1	135	387	115	135	288	1,473	259	81	1,617	196	118	957
NATURAL ABRASIVES, EXCEPT SAND, INDUSTRY														
United States, total.....	20	3	231	1,016	204	409	798	2,655	766	84	3,369	136	285	3,681
East.....	9	2	168	721	148	312	582	1,324	584	48	1,872	84	211	2,049
South and West.....	11	1	63	295	56	97	216	1,331	182	36	1,497	52	74	1,632

NA Not applicable.

1958 CENSUS OF MINERAL INDUSTRIES

Table 3.--PRIMARY PRODUCTS OF THE PUMICE AND PUMICITE AND NATURAL ABRASIVES, EXCEPT SAND, INDUSTRIES PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Total production (1,000 short tons)	Total shipments including interplant transfers		Total production (1,000 short tons)	Total shipments including interplant transfers	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
Pumice and pumicite.....	1,850	1,817	5,009	1,938	1,937	3,489
Natural abrasives, except sand.....	66	65	3,511	78	77	3,596

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

January 1960

MTC(P)-14H-5

TALC, SOAPSTONE, AND PYROPHYLLITE

(S.I.C. CODE 1496)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Talc, Soapstone, and Pyrophyllite Industry were valued at \$14.9 million, an increase of 26 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed a decrease of 10 percent from 1954 to 1958 to a total of 1,331 employees in 1958. Value added in mining in the industry amounted to \$11.7 million in 1958, an increase of 23 percent from 1954 when the previous Census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy,

contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1.—GENERAL STATISTICS FOR THE TALC, SOAPSTONE, AND PYROPHYLLITE INDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	64	68	138	25
With 20 or more employees.....	do.....	12	13	(NA)	(NA)
All employees:					
Number.....	Number.....	1,331	1,471	1,137	632
Payroll.....	Thousand dollars..	5,411	4,940	1,189	832
Production and development workers:					
Number.....	Number.....	1,124	1,297	970	550
Man-hours.....	Thousands.....	2,302	2,778	2,068	(NA)
Wages.....	Thousand dollars..	4,155	4,141	807	615
Value added in mining.....	do.....	11,694	9,486	2,441	2,012
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	do.....	3,577	3,044	828	676
Cost of purchased machinery installed.....	do.....	496	486	(NA)	35
Value of shipments and receipts.....	do.....	14,899	11,819	3,269	2,688
Capital expenditures.....	do.....	868	1,197	(NA)	(NA)

NA Not available.

¹Represents number of mines.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For sale by Bureau of the Census, Washington 25, D. C., and U.S. Department of Commerce Field Offices. 10 cents.
Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00

The Talc, Soapstone, and Pyrophyllite Industry represents establishments engaged primarily in mining, quarrying, milling, and otherwise preparing talc, soapstone, and pyrophyllite. This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments.

The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths are operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Talc, Soapstone, and Pyrophyllite Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. The total value of shipments and other receipts of establishments classified in the Talc, Soapstone, and Pyrophyllite Industry amounted to \$14.9 million dollars. Of this total, \$14.6 million were products primary to the industry and \$0.3 million were products primary to other industries and receipts for contract services.

The total value of shipments for the industry which is the total value of receipts of establishments classified in the industry should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figure appearing in Table 3 indicates that the value of crude and prepared talc, soapstone, and pyrophyllite shipped by all industries was \$19.3 million dollars. All crude talc, soapstone, and pyrophyllite was produced in the Talc, Soapstone, and Pyrophyllite Industry. But of the total of \$17.6 million for the value of such prepared minerals, \$12.9 million or 73 percent, were shipped by establishments classified in this industry and \$4.7 million, or

27 percent, were shipped by establishments classified in the manufacturing industry, "Minerals and earths, ground or otherwise treated."

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in Table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such figures for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear later in the final Census report, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. Similar preliminary reports and final reports will be issued for other industries during the coming months. A series of preliminary summary reports showing United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

3

Table 2.—GENERAL STATISTICS FOR THE TALC, SOAPSTONE, AND PYROPHYLLITE INDUSTRY, BY REGIONS AND STATES: 1958 AND 1954

Region and State	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
	Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)			(\$1,000)
United States, total	64	12	1,331	5,411	1,124	2,302	4,155	11,694	3,577	496	14,899	868	1,471	9,486
Northeast.....	6	4	436	2,506	349	724	1,874	5,738	1,568	132	7,158	280	428	3,959
South.....	18	7	769	2,289	670	1,371	1,815	4,622	1,412	288	5,838	484	873	4,056
North Carolina...	8	4	252	831	192	399	579	1,768	463	93	2,178	146	227	1,425
West.....	40	1	126	616	105	207	466	1,334	597	76	1,903	104	170	1,471
California.....	27	1	99	507	79	154	365	1,128	480	60	1,580	88	132	1,133

Table 3.—PRIMARY PRODUCTS OF THE TALC, SOAPSTONE, AND PYROPHYLLITE INDUSTRY PRODUCED IN ALL INDUSTRIES IN THE UNITED STATES: 1958 AND 1954

Product	1958			1954		
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers	
		Quantity	Value		Quantity	Value
	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(\$1,000)
Crude talc, soapstone, and pyrophyllite:						
Mined and prepared at same establishment.....	490	xxx	xxx	485	xxx	xxx
Production and shipments.....	726	238	1,700	610	1,140	1,271
Prepared (crushed, ground, or sawed, including flotation concentrates), total.....	(NA)	600	17,592	(NA)	588	13,079
Ore mined and processed at establishments classified in the mineral industries	453	456	12,907	2,469	1,465	10,303
Ore processed at establishments classified in the manufacturing industries.....	(NA)	144	4,685	(NA)	123	2,776

¹Represents gross shipments less receipts of crude and ground material from other establishments for preparation.²Represents production of sawed and ground material only.

NA Not available.

1958

Census of Mineral Industries

Industry and Product Reports

(Subject to Revision)

March 1960

MIC(P)-14H-6

MISCELLANEOUS NONMETALLIC MINERALS

(S.I.C. CODE 1499)

(Advance information on industries and products in the 1958 Census of Mineral Industries. This report will be superseded by a 1958 Census of Mineral Industries final report, which, in turn, will be included in Volume I, Summary and Industry Statistics)

During 1958, shipments of the Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified, Industry were valued at \$31.6 million, an increase of 27 percent over 1954, according to preliminary results obtained from the 1958 Census of Mineral Industries conducted by the Bureau of the Census, Department of Commerce. Average employment in this industry showed an increase of one percent from 1954 to 1958 to a total of 1,793 employees in 1958. Value added in mining in the industry amounted to \$23.3 million in 1958, an increase of 34 percent over 1954, when the previous census was taken. Value added is derived by subtracting the cost of supplies, minerals received for preparation, purchased fuels and electric energy,

contract work, and purchased machinery from value of shipments and capital expenditures. It avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure not only of value added in mineral production but also in the development of mineral properties. For these reasons it is for most purposes the best value measure for comparing the relative economic importance of mining activities among industries and geographic areas. No adjustments have been made in the money figures shown in this release for changes in price levels from 1954 to 1958.

Table 1A.—GENERAL STATISTICS FOR THE MISCELLANEOUS NONMETALLIC MINERALS, N.E.C., INDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	55	70	¹ 37
With 20 or more employees.....	...do.....	17	14	(NA)
All employees:				
Number.....	Number.....	1,793	1,768	734
Payroll.....	Thousand dollars..	8,616	7,320	845
Production and development workers:				
Number.....	Number.....	1,344	1,374	630
Man-hours.....	Thousands.....	3,000	2,703	1,395
Wages.....	Thousand dollars..	5,948	5,258	636
Value added in mining.....	...do.....	23,366	17,437	2,153
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	...do.....	9,570	7,939	² 888
Contract work only.....	...do.....	1,126	1,336	8
Cost of purchased machinery installed.....	...do.....	2,858	1,441	(NA)
Value of shipments and receipts.....	...do.....	31,609	24,860	3,041
Capital expenditures.....	...do.....	4,185	1,957	(NA)

NA Not available.

¹Represents number of mines.²Excludes the value of minerals received for preparation.

U.S. DEPARTMENT OF COMMERCE, Frederick H. Mueller, Secretary

BUREAU OF THE CENSUS, Robert W. Burgess, Director

For Sale by Bureau of the Census, Washington 25, D. C., and U. S. Department of Commerce Field Offices. 10 cents.

Complete set of approximately 45 preliminary Census of Mineral Industries reports, \$4.00.

The Miscellaneous Nonmetallic Minerals, N.E.C., Industry represents establishments engaged primarily in mining, quarrying, milling, or otherwise preparing nonmetallic minerals, not elsewhere classified, such as asbestos, diatomite, perlite, vermiculite, graphite, greensand, calcite, and natural gem stones.

Data for the industry as a whole are shown in table 1A. Data for the subindustries, Asbestos, Diatomite, and Perlite are shown in tables 1B, 1C, and 1D respectively. The value of shipments for the Asbestos Subindustry in 1958 amounted to \$5.1 million, an increase of 4 percent over 1954. The value of shipments for the Diatomite Subindustry in 1958 amounted to \$20.2 million, an increase of 37 percent over 1954. The value of shipments of the Perlite Mining Subindustry amounted to \$2.5 million, an increase of 13 percent over 1954.

This report includes data for administrative offices, storage facilities, and other auxiliary units which service mining establishments. The report is based on the 1957 Standard Industrial Classification Manual definitions of industries.

ESTABLISHMENTS

The Census of Mineral Industries is conducted by obtaining a separate report for each establishment with one or more employees or with value of shipments or capital expenditures amounting to \$500 or more. Of almost 40,000 establishments covered in the 1958 Census, about three-fourths were operated by single establishment companies. A single report was obtained from such companies. Firms operating more than one establishment were required to submit a report for each separate location. Also, companies engaged in distinctly different lines of activity at one location submitted separate reports if the company records permitted such a separation, and if the separate activities were substantial in size.

VALUE OF SHIPMENTS

The value of shipments reported by establishments classified in the Miscellaneous Nonmetallic Minerals, N.E.C., Industry consisted not only of products described above as primary to the industry, but also included the value of secondary products (which are primary in other industries), receipts for contract work performed for other establishments, and receipts for products purchased and resold without further processing at the establishment. However, such secondary receipts amounted to less than one percent of the total value of shipments and other receipts of establishments classified in the Miscellaneous Nonmetallic Minerals, N.E.C., Industry.

The total value of shipments for the industry, which is the total value of receipts of establishments classified in the industry, should be clearly distinguished from the total value of primary products of the industry shipped by all producers. The latter figures appear in table 3. However, the total value of

shipments of miscellaneous nonmetallics by establishments classified in other industries in 1958 amounted to less than one percent of the value of the shipments of all producers of such products.

The total value of shipments for an industry contains some duplication introduced by the inclusion of minerals transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments in table 1. The "net" shipments are obtained by subtracting the value of crude minerals transferred to other establishments, or, if not available, cost of minerals received for preparation from the "gross" shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

GENERAL STATISTICS

The general statistics (employment, payrolls, cost of supplies, value of shipments, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in that industry, but also their activities in the production of secondary products and the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 and 2) with product statistics (table 3) which show the shipments by all producers of the primary products of the industry.

PUBLICATION PROGRAM AND BACKGROUND

More detailed figures for this industry will appear in the final Census reports, which will be published and offered for sale at a later date by the Superintendent of Documents, U. S. Government Printing Office. These reports will also include a comprehensive discussion of such concepts as "industry," "establishment," "secondary production," "employment," and "value added." Similar preliminary and final reports will be issued for other industries during the coming months. A summary of preliminary United States totals for each mining industry and totals for each State will also be issued shortly. Final industry reports and final State reports will be published during the spring and summer of 1960. Order forms which list these reports and their prices may be obtained from local U. S. Department of Commerce Field Offices or by writing to the Bureau of the Census, Washington 25, D. C.

The 1958 Census of Mineral Industries is the 14th such Census in the United States. The first Census of Mineral Industries covered the year 1840. For 1958, it was conducted jointly with Censuses of Manufactures, Retail, Wholesale, and Service Trades. The 1958 Census of Mineral Industries was conducted under authority of Title 13 of the United States Code. This law requires that a Census of Mineral Industries be conducted every five years to cover years ending in three and eight.

1958 CENSUS OF MINERAL INDUSTRIES

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Table 1B.—GENERAL STATISTICS FOR THE ASBESTOS SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, 1939, AND 1929

Item	Unit of measure	1958	1954	1939	1929
Establishments:					
Total.....	Number.....	14	17	19	11
With 20 or more employees.....	..do.....	4	(NA)	(NA)	(NA)
All employees:					
Number.....	Number.....	470	435	169	211
Payroll.....	Thousand dollars..	1,608	1,402	169	271
Production and development workers:					
Number.....	Number.....	415	394	160	195
Man-hours.....	Thousands.....	802	754	344	(NA)
Wages.....	Thousand dollars..	1,287	1,164	151	237
Value added in mining.....	..do.....	3,763	3,899	341	319
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	1,450	1,093	151	78
Contract work only.....	..do.....	190	174	3	2
Cost of purchased machinery installed.....	..do.....	182	248	(NA)	89
Value of shipments and receipts.....	..do.....	5,050	4,877	492	397
Capital expenditures.....	..do.....	345	363	(NA)	(NA)

NA Not available.

¹Represents number of mines.

Table 1C.—GENERAL STATISTICS FOR THE DIATOMITE SUBINDUSTRY IN THE UNITED STATES: 1958, 1954, AND 1939

Item	Unit of measure	1958	1954	1939
Establishments:				
Total.....	Number.....	13	14	14
With 20 or more employees.....	..do.....	7	(NA)	(NA)
All employees:				
Number.....	Number.....	855	864	361
Payroll.....	Thousand dollars..	4,791	3,880	476
Production and development workers:				
Number.....	Number.....	619	635	299
Man-hours.....	Thousands.....	1,498	1,206	751
Wages.....	Thousand dollars..	3,303	2,718	338
Value added in mining.....	..do.....	14,750	9,233	1,393
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	6,571	5,590	2,625
Contract work only.....	..do.....	723	858	...
Cost of purchased machinery installed.....	..do.....	2,019	1,036	(NA)
Value of shipments and receipts.....	..do.....	20,212	14,784	2,018
Capital expenditures.....	..do.....	3,128	1,075	(NA)

NA Not available.

¹Represents number of mines.²Excludes the value of minerals received for preparation.

Table 1D.—GENERAL STATISTICS FOR THE PERLITE MINING SUBINDUSTRY IN THE UNITED STATES: 1958 AND 1954

Item	Unit of measure	1958	1954
Establishments:			
Total.....	Number.....	14	19
With 20 or more employees.....	..do.....	3	(NA)
All employees:			
Number.....	Number.....	156	123
Payroll.....	Thousand dollars..	783	486
Production and development workers:			
Number.....	Number.....	120	101
Man-hours.....	Thousands.....	320	241
Wages.....	Thousand dollars..	563	369
Value added in mining.....	..do.....	1,717	1,621
Cost of supplies, minerals received for preparation, purchased fuel and electric energy, and contract work.....	..do.....	795	665
Contract work only.....	..do.....	212	(NA)
Cost of purchased machinery installed.....	..do.....	542	69
Value of shipments and receipts.....	..do.....	2,549	2,259
Capital expenditures.....	..do.....	505	96

NA Not available separately.

1958 CENSUS OF MINERAL INDUSTRIES

Table 2.—GENERAL STATISTICS FOR THE MISCELLANEOUS NONMETALLIC MINERALS, N.E.C., INDUSTRY, BY REGIONS: 1958 AND 1954

Region	1958											1954		
	Establishments, number		All employees		Production and development workers			Value added in mining	Cost of minerals received for preparation, supplies, purchased energy, and contract work	Cost of pur- chased machin- ery in- stalled	Value of shipments and receipts	Capital expendi- tures	All em- ploy- ees, number	Value added in mining
	Total	With 20 or more em- ploy- ees	Number	Payroll	Number	Man- hours	Wages							
				(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)
United States, total.....	55	17	1,793	8,616	1,344	3,000	5,948	23,366	9,570	2,858	31,609	4,185	1,768	17,437
East and South.....	12	3	425	1,718	304	589	1,112	4,448	1,290	179	5,658	259	503	4,077
Mountain.....	29	9	599	2,655	483	1,068	1,937	5,326	2,726	2,472	7,645	2,879	465	4,899
Pacific.....	14	5	769	4,243	557	1,343	2,899	13,592	5,554	207	18,306	1,047	800	8,461

Table 3.—PRIMARY PRODUCTS OF THE MISCELLANEOUS NONMETALLIC MINERALS, N.E.C., INDUSTRY: 1958 AND 1954

Product	1958			1954		
	Total production	Total shipments including interplant transfers		Total production	Total shipments including interplant transfers	
		Quantity	Value		Quantity	Value
	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(\$1,000)
Asbestos, crude and prepared.	44	144	14,900	49	50	4,874
Diatomite, prepared.....	458	451	20,114	461	1364	114,562
Perlite:						
Crude.....	364	18	92	277	277	2,136
Prepared ²	278	265	2,457			
Other nonmetallic minerals: ³						
Crude.....	206	2	36	(NA)	(NA)	2,742
Prepared.....	204	209	3,695			

NA Not available.

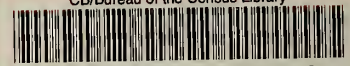
¹Represents net shipments, that is, gross shipments less minerals received from other establishments for preparation.²Includes simple preparation methods such as drying and crushing; does not include expansion.³Represents such minerals as vermiculite, graphite, and greensand.

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